New Series, Vol. XVI, June, 1941 No. 2

THE CLEMSON AGRICULTURAL COLLEGE

RECORD

FORTY-EIGHTH YEAR

CATALOG NUMBER

1940-1941

ANNOUNCEMENTS 1941-1942

Published quarterly by the Clemson Agricultural College, Clemson, South Carolina. Entered as second class matter April 29, 1905, at the Post Office at Clemson, South Carolina, under the Act of July 16, 1894, now superseded by the Act of August 24, 1912.

New Series, Vol. XVI, June, 1941 No. 2

THE CLEMSON AGRICULTURAL COLLEGE

RECORD

FORTY-EIGHTH YEAR

CATALOG NUMBER 1940-1941

ANNOUNCEMENTS 1941-1942

Published quarterly by the Clemson Agricultural College, Clemson, South Carolina. Entered as second class matter April 25, 1905, at the Post Office at Clemson, South Carolina, under the Act of July 16, 1894, now superseded by the Act of August 24, 1912.

1941

JANUARY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

MARCH

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

APRIL

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

MAY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

JULY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SEPTEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

OCTOBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

NOVEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

DECEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

1942

JANUARY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

MARCH

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

APRIL

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

MAY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

JUNE

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

JULY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

AUGUST

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

SEPTEMBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

OCTOBER

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

COLLEGE CALENDAR

SESSION 1941-1942

1941

Matriculation, new students	September 10
First payment due Treasurer, new students	September 10
Matriculation, upperclassmen	September 15
First payment due Treasurer, upperclassmen	September 15
Registration, upperclassmen	September 16
Second payment due Treasurer, all students	November 20
Christmas Holidays begin at 1 P. M.	December 20

1942

Christmas Holidays end at 10 P. M.	January 4
First Semester ends	January 31
Third payment due Treasurer, all students	February 2
Registration, Second Semester	February 2
Fourth Payment due Treasurer, all students	April 3
Graduating Exercises	June 1

The above schedule is subject to change by the Faculty.

TABLE OF CONTENTS*

*Detailed index may be found on page 253

BOARD OF TRUSTEES

Life Members

W. W. Bradley, *Chairman*—Columbia, Richland County
*A. F. Lever—Columbia, Richland County
Paul Sanders—Ritter, Colleton County
J. E. Sirrine—Greenville, Greenville County
Christie Benet—Columbia, Richland County
T. B. Young—Florence, Florence County
R. M. Cooper—Charleston, Charleston County
**J. F. Byrnes—Spartanburg, Spartanburg County

Term Expires 1942

S. H. Sherard—Ninety Six, Greenwood County
W. C. Graham—Pamplico, Florence County
Edgar A. Brown—Barnwell, Barnwell County

Term Expires 1944

F. E. Cope—Cope, Orangeburg County
*W. D. Barnett—Columbia, Richland County
***J. P. Mozingo, III—Darlington, Darlington County
J. B. Douthit, Jr.—Pendleton, Anderson County

S. W. Evans, *Secretary*—Clemson, S. C.

STANDING COMMITTEES OF BOARD

Agricultural: Sherard, *Chairman;* Young, Cooper, Sanders, Cope, Douthit.
(This committee is also the Veterinary Committee, the Crop Pest Commission, and the Experiment Station Board of Control.)

Executive: Benet, *Chairman;* Sirrine, Young, Cooper, Brown, Graham.

Fertilizer: Cope, *Chairman;* Sherard, Sanders, Douthit, Graham, Mozingo.

Finance: Benet, Sirrine, Brown, Douthit, Mozingo.

STATED MEETINGS OF BOARD

3:00 P.M.—Third Friday in March.
3:00 P.M.—Third Friday in June.
3:00 P.M.—Fourth Monday in October.

*Deceased.
**Elected April, 1941, in place of A. F. Lever, deceased.
***Elected March, 1941, to fill the unexpired term of W. D. Barnett, deceased.

BOARD OF VISITORS 1940

Thomas Ancrum ---------- Camden
(Hold-over member)
Neil Trask ---------- Burton
W. M. Sanders ---------- Summerville
Samuel H. Swint ---------- Graniteville
H. A. Smith ---------- Columbia
J. C. Kinard ---------- Newberry
E. F. Gettys ---------- McCormick
B. M. Gramling ---------- Spartanburg
J. P. Isenhower ---------- Winnsboro
A. W. Huckle ---------- Rock Hill
Wade Stackhouse ---------- Dillon
C. G. Timberlake ---------- Hartsville

OFFICERS CLEMSON ALUMNI CORPORATION

President

J. Strom Thurmond, '23 ---------- Edgefield, S. C.

First Vice-President

Frank J. Jervey, '14 ---------- Washington, D. C.

Second Vice-President

F. P. Caughman, '08 ---------- Columbia, S. C.

Secretary-Treasurer

J. H. Woodward, Ex. '03 ---------- Clemson, S. C.

Assistant Treasurer

S. W. Evans, Ex. '02 ---------- Clemson, S. C.

Board of Directors

District 1—D. J. Watson, '15 ---------- Clemson
District 2—W. K. Livingston, Ex. '97 ---------- Greenville
District 3—W. K. Magill, '15 ---------- Chester
District 4—J. Strom Thurmond, '23 ---------- Edgefield
District 5—*W. D. Barnett, '10 ---------- Columbia
District 6—George Warren, '08 ---------- Hampton
District 7—T. W. Thornhill, '14 ---------- Charleston
District 8—T. I. Martin, '37 ---------- Florence
District 9—R. H. Fike, '08 ---------- Atlanta, Ga.
District 10—Frank J. Jervey, '14 ---------- Washington, D. C.
District 11—S. R. Finley, '18 ---------- Chattanooga, Tenn.
District 12—R. L. Lee, '25 ---------- Lubbock, Texas

Directors at Large

F. P. Caughman, '08 ---------- Columbia
R. Frank Kolb, '20 ---------- Columbia
C. B. Iler, '15 ---------- Greenville

*Deceased.

OFFICERS OF ADMINISTRATION

ROBERT FRANKLIN POOLE, PH.D., D.Sc.
President

*ENOCH WALTER SIKES, PH.D., LL.D.
President Emeritus

HERBERT MARSHALL POOL, COLONEL, INFANTRY
U. S. ARMY
Commandant and P. M. S. and T.

SAMUEL WILDS EVANS
Treasurer and Secretary of Board of Trustees

JAMES CORCORAN LITTLEJOHN, B.S.
Business Manager

LEE W. MILFORD, M.D.
Surgeon

GUSTAVE ERNEST METZ, B.S., M.A.
Registrar

HERBERT PRESS COOPER, PH.D.
Dean, School of Agriculture and
Director, Agricultural Experiment Station

WILLIAM BARRE AULL, B.S.
Vice-Dean, School of Agriculture

RUPERT ALONZO McGINTY, B.S., A.M.
Vice-Director, Agricultural Experiment Station

FRED HARVEY HALL CALHOUN, PH.D.
Dean, School of Chemistry

SAMUEL MANER MARTIN, B.S.
Chairman of Committee Directing the School of General Science

DAVID WISTAR DANIEL, A.M., LITT.D.
Dean Emeritus, School of General Science

SAMUEL BROADUS EARLE, A.M., M.E., LL.D.
Dean, School of Engineering

WILLIAM HAROLD WASHINGTON, B.S., M.S.
Dean, School of Vocational Education and
Dean of the Summer School

HORACE HAROLD WILLIS, B.S.
Dean, School of Textiles

BRUCE DAYVAULT CLOANINGER, B.S.
Secretary, Board of Fertilizer Control

WALTER KEYS LEWIS, V.S., M.D.V.**
Director of Livestock Sanitary Work, State Veterinarian

DAVID WAYNE WATKINS, B.S., M.A.
Director of Extension Service

CORNELIA AYER GRAHAM, B.S.
Librarian

*Deceased.
**Office: John C. Calhoun State Office Building, Columbia, S. C.

FACULTY

ROBERT FRANKLIN POOLE
President
Ph.D., Rutgers University; D.Sc., Clemson Agricultural College.

ALEXANDER, FRANK DEWITT, *Associate Professor of Sociology and Psychology.*
B.S., 1927, M.A., 1929, Peabody College; Ph.D., Vanderbilt University, 1938.

ALEXANDER, RUFUS CLIFTON, *Instructor in Vocational Education.*
B.S., Clemson Agricultural College, 1929; Graduate Work, University of South Carolina, Summer 1930; Cornell University, Summer 1931. (In charge of Agricultural Education Work, Six Mile, S. C.)

AMBROSE, LUTHER RUTHERFORD, *Assistant in Forge and Foundry and Machine Shop.*
B.S., Clemson Agricultural College, 1939.

ANDERSON, ROBERT LOVELL, *Associate Professor of Architecture.*
A.B., Princeton University, 1925; Graduate Work, Columbia University, 1925-1926; Harvard University, 1929-1930; Institute d'Art et d'Archaeologie, Sorbonne, Summer 1929; New York University, Summer 1936.

ARMSTRONG, GEORGE MILLER, *Professor of Botany and Bacteriology.*
B.S., Clemson Agricultural College, 1914; M.A., University of Wisconsin, 1917; Ph.D., Washington University, 1921.

AULL, GEORGE HUBERT, *Professor of Agricultural Economics.*
B.S., Clemson Agricultural College, 1919; M.S., University of Virginia, 1928; Ph.D., University of Wisconsin, 1937.

AULL, WILLIAM BARRE, *Vice-Dean, School of Agriculture; Associate Professor of Bacteriology.*
B.S., Clemson Agricultural College, 1907; Graduate Work, University of Virginia, 1909-1910; Iowa State College, Summers 1925, 1927, 1928.

BELL, MARSHALL CORNETT, *Instructor in Mathematics.*
A.B., 1933, M.A., 1936, University of North Carolina.

BING, WILLIAM KYGER, *Instructor in Agricultural Economics.*
B.S., University of Virginia, 1936; Graduate Work, Virginia Polytechnic Institute, Summer 1939; University of Virginia, Summer 1940.

BLAIR, WILLIAM GARDINER, *Assistant Professor of Carding.*
New Bedford Textile School, 1908; Clemson Agricultural College, Summer, 1927.

BOOKER, LEONARD ROWLAND, *Itinerant Teacher-Trainer Industrial Education.*
B.S., Clemson Agricultural College, 1925; M.S., University of Tennessee, 1932; Clemson Agricultural College, Summers, 1938, 1939.

BOWEN, WILLIAM CLAYTON, *Assistant Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1932; Graduate Work, Colorado State College, Summers, 1937, 1938.

BRADBURY, DOUGLAS WILSON, *Assistant in Drawing.*
B.S., Clemson Agricultural College, 1940.

BRADLEY, MARK EDWARD, *Professor of English.*
A.B., Erskine College, 1898; Graduate Work, University of Chicago. Summers 1904, 1910; University of North Carolina, Summer 1927.

BRANDON, THEODORE EDMOND, *Instructor in English and Spanish.*
B.A., 1938, M.A., 1939, University of Alabama; Graduate Work, University of Alabama, Summer 1939.

BREWSTER, JAMES PENDLETON, *Instructor in Mathematics.*
A.B., 1935, M.A., 1940, Duke University.

BRIGHTWELL, WILLIAM THOMAS, *Assistant Professor of Horticulture.*
B.S., University of Tennessee, 1938; M.S., Michigan State College, 1940.

BROCK, JOHN LELAND, *Assistant Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1927; M.A., George Peabody College, 1936.

BROWN, HUGH MONROE, *Professor of Physics.*
B.A., 1920, M.A., 1921, University of Denver; Ph.D., University of California, 1927.

BROWN, PAUL JORDAN, *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
First Lieutenant, Infantry Reserve, U. S. Army; B.S., Clemson Agricultural College, 1936.

BURTNER, FRANK A., *Instructor in Economics and Sociology.*
B.A., 1939, M.A., 1939, University of Texas.

BURTON, WILLIAM WILDER, *Assistant Professor of Mathematics.*
Ph.B., Brown University, 1906; M.A., Mercer University, 1918.

CALHOUN, FRED HARVEY HALL, *Dean, School of Chemistry and Geology, Professor of Geology and Mineralogy.*
B.S., 1898, Ph.D., 1902, University of Chicago.

CAMPBELL, THOMAS ALEXANDER, JR., *Assistant Professor in Textiles.*
B.S., Clemson Agricultural College, 1928; Graduate Work, Pennsylvania State College, Summers 1939, 1940.

CARODEMOS, PETER, *Associate Professor of Chemistry.*
B.S., Tufts College, 1922; Ph.D., Cornell University, 1927; Harvard University, Summer 1932.

CARTEE, EUGENE FRANKLIN, *Acting Associate Professor of Warp Preparation and Knitting.*
B.S., Clemson Agricultural College, 1925; M.S., University of Tennessee, 1937.

CLARKE, ELWYN LORENZO, *Professor of Civil Engineering.*
B.S. in C.E., 1902, C.E., 1931, University of Illinois.

CLYBURN, DAVID ARTHUR, *Assistant Professor of Religion.*
A. B., Wofford College, 1929; B.D., Emory University, 1932; Graduate Work, Vanderbilt University, Special sessions, 1934, 1935; Union Seminary, Columbia University, Summer 1939.

COKER, EDWARD CALEB, JR., *Instructor in Mathematics.*
A.B., University of South Carolina, 1928; M.A., University of North Carolina, 1930; Graduate Work, Brown University, 1932; University of Chicago, Summers 1936, 1938, 1939; University of Chicago, 1939-1940.

COLLINGS, GILBEART HOOPER, *Professor of Soils.*
B.S., Virginia Polytechnic Institute, 1915; M.S., University of Illinois, 1917; Ph.D., Rutgers University, 1925.

COOPER, HERBERT PRESS, *Dean, School of Agriculture; Director, Agricultural Experiment Station; Professor of Agronomy.*
B.S., Clemson Agricultural College, 1911; M.S., University of Wisconsin, 1916; Ph.D., Cornell University, 1922.

COX, H. MORRIS, *Instructor in English.*
A.B., 1937, M.A., 1939, Duke University.

COX, WALTER THOMPSON, *Assistant Coach.*
B.S., Clemson Agricultural College, 1939.

CRANDALL, WILL GILES, *Professor of Vocational Education.*
B.S., Cornell University, 1920; Graduate Work, Cornell University, Summers 1929, 1930, 1931, 1940.

CREDLE, ALEXANDER BERRY, *Assistant Professor of Electrical Engineering.*
E.E., 1930, M.E.E., 1931, Ph.D., 1939, Cornell University.

CROUCH, SYDNEY, J. L., *Professor of Religion.*
Scotch College, Western Australia, 1910; Biblical Seminary, New York, 1915; B.D., Hartford Theological Seminary, 1922; Th.D., Union Theological Seminary, Richmond, Virginia, 1937.

CURTIS, DONALD DEXTER, *Professor of Mechanics and Hydraulics.*
B.E., 1919, University of Iowa; M.S., University of Iowa, 1931.

DANIEL, DAVID WISTAR, *Dean Emeritus, School of General Science, Professor of English.*
A.B., Wofford College, 1892; M.A., Vanderbilt University, 1901; Graduate Work, University of Chicago, Summer 1899; Litt.D., Wofford College, 1914.

DEAN, JORDAN ARTHUR, *Instructor in English and French.*
A.B., Wofford College, 1933; M.A., Vanderbilt University, 1934; Graduate Work, University of Illinois, 1937.

*DOUGLASS, GEORGE ARCHIBALD, *Assistant in Engineering.*
B.S., Clemson Agricultural College, 1931; Graduate Work, Virginia Polytechnic Institute, Summer 1940.

DOWNS, JAMES B. T., *Instructor in Mechanical Engineering.*
M.E., 1934, M.S., 1938, Stevens Instiute of Technology.

DOYLE, JOHN ROBERT, JR., *Instructor in English.*
B.A., Randolph-Macon College, 1932; M.A., University of Virginia, 1937.

DUNAVAN, DAVID, *Assistant Professor of Entomology and Zoology.*
B.S., Oregon Agricultural College, 1925; M.S., Iowa State College, 1928; Graduate Work, Cornell University, Summers 1929, 1931, 1935.

DUNKELBERG, GEORGE H., *Assistant Agricultural Engineer.*
B.S., 1937, M.S., 1938, Iowa State College.

DUNLAP, GEORGE HEYWARD, *Acting Assistant Professor of Carding and Spinning.*
B.S., Clemson Agricultural College, 1928; Graduate Work, University of North Carolina, Summer 1935; Massachusetts Institute of Technology, Summer 1936; Pennsylvania State College, Summers 1939, 1940.

EARLE, SAMUEL BROADUS, *Dean, School of Engineering, Professor of Mechanical Engineering, Director of Engineering Experiment Station.*
A.B., 1898, A.M., 1899, Furman University; M.E., Cornell University, 1902; LL.D., Furman University, 1932; General Electric Company.

EATON, ROBERT KNIGHT, *Professor of Carding and Spinning.*
A.B., Bowdoin College, 1905; Graduate Work, Philadelphia Textile School, 1905, 1906.

EDMOND, JOSEPH BAILEY, *Associate Professor of Horticulture.*
B.S., Michigan State College, 1923; M.S., Iowa State College, 1924; Ph.D., University of Maryland, 1933.

EDWARDS, GEORGE HERBERT, JR., *Assistant Professor of Mathematics.*
B.A., M.A., University of South Carolina, 1913; Graduate Work, University of Chicago, Summer 1915, Columbia University 1917-1918, Summer 1919.

EMANUEL, EMMETT HILL, *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
Captain, U. S. Army, Retired; B.S., Clemson Agricultural College, 1923.

*On leave 1940-1941.

EPTING, CARL LAFAYETTE, *Instructor in History and Government.*
A.B., Newberry College, 1921; A.M., University of South Carolina, 1924; Graduate Work, University of South Carolina, 1926, 1928, 1932-1934; University of North Carolina, Summers 1927, 1928.

FARR, FRANK BURDICK, *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
Captain, Infantry Reserve, U. S. Army; B.S., Clemson Agricultural College, 1930.

FEELEY, ROBERT OLIVER, *Professor of Veterinary Science.*
D.V.S., New York University, 1906.

FERNOW, BERNHARD EDWARD, *Professor of Mechanical Engineering.*
A. B., 1904, M.E., 1906, Cornell University.

FERRIER, WALLACE THOMAS, *Associate Professor of Agricultural Economics.*
A.B., Tarkio College, 1910; M.S., Colorado State College, 1930; Ph.D., University of Minnesota, 1938.

FREEMAN, EDWIN JONES, *Associate Professor of Machine Shop.*
B.S., 1922, M.E., 1939, Clemson Agricultural College.

GAFFNEY, WILLIAM F., *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
First Lieutenant, Infantry Reserve, U. S. Army; B.S., Davidson College, 1930.

GAGE, GASTON, *Instructor in Textile Industry.*
B.S., Clemson Agricultural College, 1921; Graduate Work, University of North Carolina, Summers 1935, 1936; Pennsylvania State College, Summers 1939, 1940.

*GATES, JAMES EDWARD, *Professor of Economics and Government.*
B.S., University of Kentucky, 1929; Ph.D, University of Virginia, 1935.

GAYLORD, CHARLES NELSON, *Instructor in Civil Engineering.*
B.S. in C.E., Ohio University, 1930; M.S.E., University of Michigan, 1936; Graduate Work, University of Michigan, Summer 1938.

GEE, ROBERT ESTES, *Instructor in Chemistry and Geology.*
A.B., Newberry College, 1931; M.A., University of North Carolina, 1934.

GLENN, HOWARD EMMITT, *Associate Professor of Civil Engineering.*
B.S. in C.E., 1922, C.E., 1927, University of Kentucky.

GODFREY, WILLIAM EMERA, *Professor of Physics.*
A.B., 1893, A.M., 1898, Mercer University; Graduate Work, Summer Quarters 1898, 1899, 1900, University of Chicago; 1906-1907, Cornell University.

GOODALE, BEN EDMOND, *Associate Professor of Dairying.*
B.S., 1922, M.S., 1929, Iowa State College.

GREEN, CLAUD BETHUNE, *Instructor in English.*
B.A., 1935, M.A., 1938, University of Georgia; Graduate Work, University of North Carolina, Summer 1938; University of Georgia, 1938-1939, 1939-1940.

GREEN, JOSEPH COLEMAN, *Assistant Professor of English.*
B.A., 1920, M.A., 1924, Vanderbilt University; Ph.D., Vanderbilt University, 1937.

HARRIS, DAVID NIVIN, *Assistant Professor of Drawing.*
B.S., Clemson Agricultural College, 1908.

HAUSER, EDWARD RICHARD, *Instructor in Animal Husbandry.*
B.S., University of Wisconsin, 1938; M.S., Oklahoma A. & M. College, 1939.

HAWKINS, GARY FRED, *Instructor in Chemistry.*
B.S., Newberry College, 1935; Graduate Work, University of North Carolina, Summers 1939, 1940.

---

*On leave 1940-1941.

HENDRICKS, JESSE CODY, *Associate Professor of Physics.*
B.S., Franklin College, 1925; M.A., 1928, Ph.D., 1930, Indiana University.

HICKS, WILLIAM LYLES, *Instructor in Textiles.*
B.S., Clemson Agricultural College, 1931; Graduate Work, Furman University, Summer 1938; University of Tennessee, Summer 1939; University of South Carolina, Summer 1940.

HILL, HENRY H., JR., *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
First Lieutenant, Infantry Reserve, U. S. Army; B.S., Wofford College, 1937.

*HINSON, CLAUDE RANDOLPH, *Assistant Coach.*
B.S., Clemson Agricultural College, 1936.

HODGE, WYLIE FORT DUPRE, *Assistant Professor of Architecture.*
Clemson Agricultural College, 1907-1908, 1908-1909; New York School of Fine and Applied Arts, 1915-1916, 1920-1921; Further Work, R.R. Gallerie di Firenze, Italy, Summer 1931.

HODGES, BAXTER H., *Instructor in Chemistry.*
B.S., Clemson Agricultural College, 1933; Graduate Work, University of North Carolina, Summers 1935, 1936, 1937, 1938, 1939; Virginia Polytechnic Institute, Summer 1940.

**HODGES, WILEY EDWARD, *Associate Professor of Economics and Government.*
B.S., Roanoke College, 1926; M.A., Duke University, 1929; Graduate Work, Columbia University, Summer 1929; Duke University, 1929-1930, 1930-1931, 1931-1932, Ph.D. residence requirements and thesis research complete.

HOFFMAN, GILBERT EARL, *Assistant Professor of Architecture.*
B.Arch., Carnegie Institute of Technology, 1936; M.Arch., Massachusetts Institute of Technology, 1939; Graduate Work, Beaux Arts Institute of Design.

HOLMES, ALESTER GARDEN, *Professor of History.*
B.S., The Citadel, 1897; Graduate Work, University of Chicago, Summer 1911.

HOWARD, FRANK JAMES, *Head Coach of Intercollegiate Athletics.*
B.S., University of Alabama, 1931.

HUCKABEE, MARVIN L., *Instructor in Textile Chemistry and Dyeing.*
B.S., Clemson Agricultural College, 1933; Graduate Work, University of North Carolina, Summers 1935, 1936, 1937, 1938, 1939, 1940.

HUFF, LORENZ DITMAR, *Assistant Professor of Physics.*
A. B., 1927, M.S., 1928, Oklahoma University; Ph.D., California Institute of Technology, 1931.

HUFFORD, GLENN DEWITT, *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
Lieutenant Colonel, Infantry, U.S.A.; Graduate, Company Officers' Course, The Infantry School, 1925.

HUNTER, HOWARD L., *Associate Professor of Chemistry.*
B.Chem., 1925, Ph.D., 1928, Cornell University; Massachusetts Institute of Technology, Summer 1939.

HUNTER, JOSEPH EVERETT, *Professor of Mathematics.*
B.S., Clemson Agricultural College, 1896; Graduate Work, University of Chicago, Summers 1902, 1904, 1910; University of North Carolina, Summer 1928.

JENKINS, DAVID ROSS, *Assistant Professor of Rural Sociology.*
A.B., Victoria University College, 1936; A.M., University of New Zealand, 1937; Ph.D., Columbia University, 1940.

---

*On leave after February 15, 1941.
**In place of J. E. Gates on leave.

JOHNSON, WILLIS EDWIN, *Assistant Professor of Vocational Education.*
B.S., Mississippi A. and M. College, 1922; Graduate Work, Cornell University, Summer 1931.
(In charge of Agricultural Education work at Seneca, S. C.)

JONES, JESS WILLARD, *Instructor in Agronomy.*
B.S., Clemson Agricultural College, 1937; M.S., Cornell University, 1938.

JONES, ROBERT MAURICE, *Instructor in Vocational Education.*
B.S., Clemson Agricultural College, 1931; Graduate Work, University of Tennessee, Summer 1938; Clemson Agricultural College, Summer 1940.
(In charge of Agricultural Education work, Pendleton, S. C.)

JONES, ROBERT MORGAN, *Assistant Coach.*
B.S., Clemson Agricultural College, 1930.

KELLY, LOUIS GRANT, *Instructor in Mathematics.*
B.S., Clemson Agricultural College, 1937; Graduate Work, University of North Carolina, Summers 1938, 1939, 1940.

KINARD, FRANCIS MARION, *Associate Professor of English.*
A.B., Wofford College, 1923; A.M., University of North Carolina, 1929; Graduate Work, University of North Carolina, Summer 1930.

KING, LOUIS ARTHUR, *Instructor in Electrical Engineering.*
B.S., in E.E., University of Tennessee, 1938; M.S. in E.E., University of Missouri, 1940.

KIRCHNER, GEORGE FREDERICK, *Instructor in Intramural Sports.*
B.S., Clemson Agricultural College, 1933; M.S., Louisiana State University, 1938.

KIRKLEY, FRANCIS EDWARD, *Assistant Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1929; Graduate Work, Clemson Agricultural College, Summers 1938, 1939, 1940.
(In charge of Agricultural Education work, Central, S. C.)

KIRKWOOD, CHARLES EDWARD, JR., *Instructor in Mathematics and Physics.*
A.B., Lynchburg College, 1935; M.S., University of Georgia, 1937; Graduate Work, University of North Carolina, Summer 1939.

KLUGH, WILLISTON WIGHTMAN, *Associate Professor of Drawing.*
B.S., Clemson Agricultural College, 1896; Graduate Work, Vanderbilt University, 1898; Cornell University, 1900.

LAMASTER, JOSEPH PAUL, *Professor of Dairying.*
B.S., 1913, M.S., 1928, University of Kentucky.

LANE, JOHN DEWEY, *Associate Professor of English.*
A.B., Newberry College, 1920; M.A., University of Virginia, 1924; Graduate Work, Columbia University, 1928-1929, Summer 1923; George Peabody College, Summer 1935.

LEE, RUDOLPH EDWARD, *Professor of Architecture.*
B.S., 1896, M.Arch., 1928, Clemson Agricultural College; Graduate Work, Zanerian Art School, Summer, 1899; Cornell University, Summer 1900; University of Pennsylvania, 1901.

LINDSAY, JOSEPH, JR., *Professor of Textile Chemistry and Dyeing.*
A.B. Erskine College, 1919; Graduate Work, University of North Carolina, 1923-1924; Massachusetts Institute of Technology, 1924; University of Chicago, 1925; Philadelphia Textile School 1925-1926; University of Tennessee, Summer 1940.

LIPPINCOTT, WILLIAM LEROY, *Associate Professor of Chemistry.*
B.Chem., 1918, Graduate Work, Cornell University, 1919-1920, Summer 1940.

LIPSCOMB, RALPH WALDO, *Instructor in Agronomy.*
B.S., Clemson Agricultural College, 1928; M.S., Michigan State College, 1930.

*LUCAS, JOHN PAUL, *Assistant Professor of English.*
A.B., Duke University, 1930; M.S., State College of the University of North Carolina, 1931; A.M., Princeton University, 1933.

MCADAMS, WILLIAM NEWTON, *Instructor in Agricultural Engineering and Assistant Agricultural Engineer.*
B.S., Clemson Agricultural College, 1938; M.S., University of Georgia, 1939.

MCCARTER, ELMER HEATH, *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
First Lieutenant, Infantry Reserve, U. S. Army; B.S., Clemson Agricultural College, 1936.

MCDOWELL, DAVID ARCHIBALD, *Instructor in English.*
A.B., Furman University, 1938; M.A., University of North Carolina, 1939.

MCGINTY, RUPERT ALONZO, *Vice-Director of Agricultural Experiment Station.*
B.S., Alabama Polytechnic Institute, 1913; A.M., Washington University, 1919; Graduate Work, Cornell University, 1926-1927.

MCKENNA, ARTHUR ERNEST, *Associate Professor of Weaving and Design.*
Graduate Rhode Island School of Design, 1922; Bradford-Durfee Textile School, 1925; B.S., Clemson Agricultural College, 1930; M.S., University of Tennessee, 1933.

MCMAKIN, GARVIN CARR, *Assistant in Wood Shop.*
B.S., Clemson Agricultural College, 1940.

MCMILLAN, COVINGTON, *Assistant Coach.*
B.S., Clemson Agricultural College, 1930, M.A., George Peabody College, 1935.

MARSHALL, JOHN LOGAN, *Associate Professor of Wood Work.*
Georgia School of Technology, 1905-1906, 1906-1907; B.S., Clemson Agricultural College, 1909; Graduate Work, Bradley Polytechnic Institute, 1919.

MARTIN, SAMUEL MANER, *Chairman of Committee Directing the School of General Science, Professor of Mathematics.*
B.S., The Citadel, 1896; Graduate Work, Cornell University, Summer 1900; Harvard University, Summer 1904; University of Chicago, Summer 1908.

METZ, GUSTAVE ERNEST, *Registrar.*
B.S., Clemson Agricultural College, 1927; M.A., University of North Carolina, 1928; Graduate Work, University of North Carolina, 1928-1929; Ohio State University, Summer 1930; Teachers College, Columbia University, 1931-1932; University of Chicago, Summer 1939.

MILLER, WILLIAM GILBERT, *Instructor in Mathematics.*
A.B., Birmingham Southern College, 1931; M.A., University of Florida, 1933; Graduate Work, University of Florida, Summer 1933.

MILLS, WILLIAM HAYNE, *Professor of Rural Sociology.*
A.B., Davidson College, 1892; B.D., Columbia Theological Seminary, 1897.

MITCHELL, JACK HARRIS, *Professor of Chemistry.*
B.S., 1903, M.S., 1904, Alabama Polytechnic Institute; M.S., University of Illinois, 1911.

**MONROE, JAMES BEASLEY, *Associate Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1915; M.S., Texas A. & M. College, 1935; Graduate Work, Cornell University, Summer 1938.

MORGAN, CHARLES LEE, *Professor of Poultry Husbandry.*
B.S., 1918, M.S., 1927, University of Kentucky; Graduate Work, University of Wisconsin, 1931-1932.

---

*On leave 1940-1941.
**On leave after December 16, 1940.

MUSSER, ALBERT MYERS, *Professor of Horticulture.*
B.S., University of Florida, 1918; Graduate Work, Michigan State College, 1930, 1933.

NEAL, BASCOME L., *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
Second Lieutenant, Infantry Reserve, U.S. Army; B.S., Mississippi State College, 1938.

NEWMAN, CHARLES CARTER, *Professor of Horticulture.*
Alabama Polytechnic Institute; B.S., Clemson Agricultural College, 1895.

NORMAN, ABSALOM WILLIS, *Assistant Coach.*
A.B., Roanoke College, 1913.

NUTT, GEORGE B., *Associate Professor of Agricultural Engineering.*
B.S., Mississippi State College, 1930; M.S., Iowa State College, 1940.

ORENS, IRVING PEARY, *Assistant Professor of Physics.*
B.S., University of Virginia, 1926; M.A., Columbia University, 1928; Ph.D., University of Virginia, 1934.

PATRICK, CHARNER SCAIFE, *Head Farms Department.*
B.S., Clemson Agricultural College, 1913; Graduate Work, Iowa State College, 1930, Summer 1931.

PETERSON, MILO J., *Assistant Agricultural Economist.*
B.S., University of Minnesota, 1933; M.S., Cornell University, 1937; Ph.D., Cornell University, 1940.

PETERSON, VERD, *Consulting Professor of Agricultural Education, State Supervisor of Agricultural Education, Columbia, S. C.*

PHILPOT, CLAUDE PAUL, *Assistant Professor of Forge and Foundry.*
B.S., Clemson Agricultural College, 1928; Training Course, Bethlehem Steel Company, 1928; Graduate Work, Virginia Polytechnic Institute, Summer 1940.

PITTS, IRA S., JR., *Instructor in Textiles.*
B.S., Clemson Agricultural College, 1929.

POLLARD, FRANK H., *Professor of Chemistry.*
B. of Chem., 1916, Ph.D., 1922, Cornell University.

POOL, HERBERT MARSHALL, *Professor of Military Science and Tactics, Commandant of Cadets.*
Colonel, Infantry, U. S. Army; B.S., A. and M. College of Texas, 1911; Graduate, The Infantry School, 1925; Command and General Staff School, 1926; Army War College, 1931; General Staff Corps Eligible List.

PRINCE, ALTON ERNEST, *Instructor in Botany.*
B.S., University of Maine, 1936; M.S., University of Maine, 1938; M.A., Harvard University, 1940.

QUATTLEBAUM, ALEXANDER MCQUEEN, *Assistant Professor of Civil Engineering.*
B.S., Clemson Agricultural College, 1934; M.S., Cornell University, 1935; Graduate Work, University of Iowa, 1939-1940.

REED, ALBERT RAYMOND, *Assistant Professor of Physics.*
A.B., Wofford College, 1925; M.S., University of South Carolina, 1931; Graduate Work, University of North Carolina, Summers 1931, 1933.

RHODES, SAM ROSEBOROUGH, *Professor of Electrical Engineering.*
B.L., 1900, M.S., 1901, Furman University; B.S., 1907, E.E., 1928, Clemson Agricultural College; General Electric Company; Westinghouse Electric and Manufacturing Company.

RHYNE, ORESTES PEARL, *Professor of Modern Languages*
A.B. Lenoir-Rhyne College, 1907; A.B., 1908, A.M., 1909, University of North Carolina; Ph.D., Johns Hopkins University, 1913; University of Heidelberg, Summer 1914; Resident in Leipzig, Summer 1922.

RITCHIE, ROBERT RUSSELL, *Assistant Professor of Animal Husbandry.*
B.S., 1926, M.S., 1938, Iowa State College.

ROGERS, THOMAS TINSLEY, *Assistant Coach.*
B.A., Duke University, 1934.

ROSENKRANS, DUANE B., *Associate Professor of Botany.*
A.B., Upper Iowa University, 1911; M.A., University of Wisconsin, 1917.

SAMS, JAMES HAGOOD, JR., *Associate Professor of Mechanical Engineering.*
B.S., Clemson Agricultural College, 1924; E.E., Cornell University, 1926; M.S., 1931, Ph.D., 1937, University of Michigan.

SHANKLIN, AUGUSTUS G., *Professor Emeritus of Mathematics.*
B.S., The Citadel, 1893; Graduate Work, Cornell University, Summer 1908; Columbia University, Summer 1911.

SHELDON, DAWSON C., *Associate Professor of Mathematics.*
B.S., State College of Washington, 1925; M.A., 1927, Ph.D., 1929, University of California.

SHENK, DONALD H., *Associate Professor of Mechanical Engineering.*
B.S., M.E., Purdue University, 1924; Graduate Work, Purdue University, 1927-1929; S.P.E.E., Summer School 1929.

SHERMAN, FRANKLIN, *Professor of Entomology and Zoology.*
B.S., Agriculture, Cornell University, 1900; M.S., University of Maryland, 1912.

SHIGLEY, JOSEPH EDWARD, *Instructor in Engineering.*
B.S. in E.E., 1931, B.S. in M.E., 1932, Purdue University.

SIMS, JULES V., *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
Major, Infantry, U. S. Army; Graduate, The Infantry School, 1930.

STAPP, MERRILL COLBY, *Instructor in Mathematics.*
B.S., Millsaps College, 1927; M.A., George Peabody College, 1933.

STARKEY, LAWRENCE VINCENT, *Professor of Animal Husbandry.*
B.S., University of Illinois, 1914; M.S., University of Wisconsin, 1917; Graduate Work, University of Wisconsin, 1930.

*STEPHENS, JOHN CALHOUN, JR., *Instructor in English.*
A.B., 1937, M.A., 1938, Emory University; Graduate Work, Emory University, Summer 1939.

STEVENSON, WILLIAM DAMON, JR., *Instructor in Electrical Engineering.*
B.S.E., Princeton University, 1934; B.S. in E.E., Carnegie Institute of Technology, 1939; Graduate Work, University of Michigan.

STRIBLING, BRUCE HODGSON, *Associate Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1918; Graduate Work, George Peabody College, Summers 1927, 1929; Ohio State University, Summers 1939, 1940.

TARRANT, WILLIAM EDWARD, *Assistant Professor of Weaving.*
B.S., Clemson Agricultural College, 1927; Graduate Work, Alabama Polytechnic Institute, Summer 1932; Clemson Agricultural College, Summers 1937, 1938; Pennsylvania State College, Summers 1939, 1940.

**TATE, HAROLD SIMMONS, *Associate Professor of Vocational Education.*
B.S., Clemson Agricultural College, 1925; M.A., Columbia University, 1929; Graduate Work, George Peabody College, Summers 1927, 1931, 1932; Pennsylvania State College, Summers 1936, 1937, 1938, 1939, 1940.

TAYLOR, FRED HERBERT, *Instructor in Botany.*
B.S., Massachusetts State College, 1933; A.M., 1934, Ph.D., 1939, Harvard University.

---

*On leave 1940-1941.
**On leave after April 1, 1941.

TAYLOR, RUPERT, *Associate Professor of English.*
A.B., 1903, A.M., 1906, University of Arkansas; Ph.D., Columbia University, 1911.

THERKELSEN, ERNEST BRIGHAM, *Instructor in Electrical Engineering.*
B.S., Montana State College, 1936; Graduate Work, Massachusetts Institute of Technology, Summer 1939.

TINGLEY, FREEMAN THAYER, *Associate Professor of Electrical Engineering.*
B.S., 1922, E.E., 1935, Bucknell University; M.S., University of Illinois, 1929; Course, Westinghouse Company.

TURNER, BENJAMIN RYAN, *Consulting Professor of Industrial Education.*
A.B., 1926, M.A., 1931, Wofford College; Clemson College, Summer 1927; Graduate Work, University of Cincinnati, 1934-1935, Summer 1936.

VANDIVERE, EDGAR, *Instructor in Physics.*
A.B., Emory University, 1934; M.A., Duke University, 1935; Graduate Work, Duke University, 1935-1936.

WACHTER, WILLIAM MAHLER, *Instructor in Mechanics and Surveying.*
B.S. in C.E., Oregon State College, 1939.

WALKER, R. CASPER, *Instructor in History and Government.*
A.B., 1935, M.A., 1937, Emory University; Graduate Work, Louisiana State University, 1939-1940.

WALTERS, JOHN VERNON, *Instructor in Textiles.*
B.S., Clemson Agricultural College, 1933, Summer, 1938; Graduate Work, Pennsylvania State College, Summer 1940.

WALTHOUR, RUSSELL FLEMING, JR., *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
Lieutenant Colonel, Infantry, U. S. Army; B.S., Alabama Polytechnic Institute, 1916; Graduate, The Infantry School, 1922.

WARD, JAMES EDWARD, JR., *Professor of Economics and Government.*
B.S., 1929, M.S., 1931, University of Virginia; Ph.D., University of Virginia, 1935.

WARE, ROBERT EDWARD, *Instructor in Zoology and Entomology.*
B.S., Iowa Wesleyan College, 1929; Graduate Work, Iowa State College, Summers, 1931, 1932, 1938, 1940.

WASHINGTON, WILLIAM HAROLD, *Dean, School of Vocational Education, Dean of the Summer School.*
B.S., Clemson Agricultural College, 1920; M.S., Iowa State College, 1922; Graduate Work, Georgia School of Technology, Summer 1925; George Peabody College, Summers 1928, 1929; 1932-1933.

WATSON, SAMUEL MCIVER, JR., *Instructor in Mechanical Engineering.*
A.B., Elon College, 1936; B.S., N. C. State College, 1937.

WHITE, THOMAS ARLINGTON, *Professor of Vocational Education.*
B.S., 1924, M.S., 1929, North Carolina State College; Ph.D., Cornell University, 1933.

*WILBURN, WILLIAM BRYCE SALLIS, *Instructor in English.*
B.A., 1937, M.A., 1938, University of Mississippi.

WILKINSON, HARRY J., *Assistant Professor of Military Science and Tactics, Assistant Commandant.*
Second Lieutenant, Infantry Reserve, U. S. Army.

WILLIAMS, WILLIAM BRATTON, *Assistant Professor of Weaving and Designing.*
B.S., Clemson Agricultural College, 1925; Graduate Work, Pennsylvania State College, Summers 1939, 1940.

WILLIS, HORACE HAROLD, *Dean, School of Textiles.*
B.S., Clemson Agricultural College, 1917; Cotton Spinning Research, U. S. Department of Agriculture, 1921-1930.

zurBURG, FREDERICK WILLIAM, *Assistant Professor of Chemistry.*
B.S., 1927, M.S.,1928, University of North Carolina; Graduate Work Virginia Polytechnic Institute, Summers 1939, 1940.

---

*In place of J. P. Lucas, on leave.

STANDING COMMITTEES OF THE FACULTY
1941-1942

ATHLETICS:
Milford, *Chairman;* Gage, Mitchell, Rhodes, Watkins, Frank Howard, Coach, *ex officio;* G. E. Metz, Registrar, *ex officio;* J. C. Littlejohn, Business Manager, *ex officio.*

BUILDINGS AND GROUNDS:
Watson, *Chairman;* Glenn, Holmes, Hunter, J. E., Kirchner, Lee, McGinty, Musser, Newman, Rhodes, Willis.

CATALOG:
Metz, *Chairman;* Epting, Hunter, H. L., Glenn, Kinard.

CURRICULA, COURSES, AND ENTRANCE REQUIREMENTS:
Calhoun, *Chairman;* Aull, W. B., Bradley, Brown, Earle, Sheldon.

DEFICIENT STUDENTS:
Kinard, *Chairman;* Burton, Green, J. C., Hunter, J. E., Starkey, Quattlebaum.

LIBRARY:
Bradley, *Chairman;* Anderson, R. L., Cooper, H. P., Earle, Holmes, Mills, Orens, Rosenkrans, Watkins, The Librarian.

LOANS:
Littlejohn, *Chairman;* Brown, A. J., Burley, Evans, Hill, Howard, Woodward.

PUBLIC LECTURES:
Ward, *Chairman;* Bradley, Credle, Freeman, Green, J. C., Goodale.

PUBLIC OCCASIONS AND CELEBRATIONS:
Metz, *Chairman;* Anderson, R. L., Asbill, Brock, Brown, Credle, Crouch, Fernow, Ferrier, Freeman, Goodale, Hill, Holtzendorff, Hunter, H. L., Kinard, Lane, Lippincott, Littlejohn, Morgan, Pool, H. M., Sherman, J., Taylor, R., Ward, Watson, and Miss Shanklin.

PUBLICATIONS AND RADIO:
Bryan, *Chairman;* Lane, McGinty, Sherman, J. (J. D. Lane, Faculty Advisor for Student Publications.)

SCHEDULE:
Aull, W. B., *Chairman;* Gage, Huff, Kinard, Metz, Pollard, Rhodes, Sams, Tate.

SCHOLARSHIP AND HONORS:
Sheldon, *Chairman;* Carodemos, Cox, Curtis, Green, J. C., Lindsay, McGinty, McKenna, Monroe, Taylor, F. H., Quattlebaum.

SOCIAL FUNCTIONS:
Credle, *Chairman;* Anderson, R. L., Cox, Edwards, Holtzendorff, Huckabee, Hunter, H. L., Jones, R. M., Paden, Ritchie, Sams, Tingley, The Commandant.

STUDENT GOVERNMENT:
Goodale, *Chairman;* Armstrong, Kirchner, Lane, Pool, Willis.

STUDENT ORGANIZATIONS (Including Honor Societies):
Eaton, *Chairman;* Brock, Collings, Freeman, Sheldon, Taylor, R., Marshall.

STUDENT WELFARE:
Lane, J. D., *Chairman;* Aull, G. H., Bell, Blair, Coker, Cooper, J. R., Edmond, Hill, Hunter, J. E., LaMaster, Metz, Washington, Wilburn.

UNIFORM:
Littlejohn, *Chairman;* Eaton, Evans, Holtzendorff, The Commandant, Douthit (Trustee-Member).

VISITORS:
Woodward, *Chairman;* Goodale, Hill, Holtzendorff, Jones, R. M. Watson, The Commandant.

ETHICS AND RELIGION:
Crouch, *Chairman;* Clyburn, Goode, Holtzendorff, Pinckney, Tierney.

OTHER OFFICERS AND ASSISTANTS

JACOB HENRY WOODWARD—*Assistant to the President*
VIRGINIA EARLE SHANKLIN—*Secretary to the President*
JOHN WALLACE LAGRONE, B.S., M.A.—*Assistant Registrar*
KENNETH NOTLEY VICKERY, B.S.—*Assistant to the Registrar*
JEAN BEVERLY SLOAN—*Assistant to the Registrar*
BRANTLY JOHNSTONE ALEXANDER, A.B.—*Stenographer, Registrar's Office*
DOROTHY LAW, B.S.—*Stenographer, Registrar's Office*
REMER TOWNSEND LINLEY, B.S.—*Stenographer, Registrar's Office*
JOHN GOODMAN, B.S., A.B. in L.S.—*Assistant Librarian*
JOSEPHINE VERNER STROTHER, A.B., A.B. in L.S.—*Assistant Librarian*
ELEANOR VIRGINIA DREWRY, A.B., A.B. in L.S.—*Assistant Librarian*
MARY BETH QUICK, A.B., A.B. in L.S.—*Assistant Librarian*
JOSEPH EDGAR SHERMAN, B.S.—*Athletic Publicity Director*
GRAHAM HAMILTON HILL—*Assistant Business Manager*
MARY LEIGHTON MILLS RITCHIE, B.S.—*Assistant to the Business Manager*
PAULINE WATKINS, B.S.—*Stenographer, Business Manager's Office*
BOYCE B. BURLEY—*Bookkeeper*
ANDREW JOSEPH BROWN, B.S.—*Bookkeeper*
HAROLD D. COCHRAN—*Assistant Bookkeeper*
HELEN MORRISON—*Assistant to the Treasurer*
IDA TOWNSEND—*Clerk, Treasurer's Office*
EDNA BLAKE, B.A.—*Clerk, Treasurer's Office*
JOSEPH G. BOUGARD, Sergeant, U. S. Army—
Instructor of Military Science and Tactics, Assistant to the Commandant
GARVIN CANNON, Sergeant, U. S. Army —
Instructor of Military Science and Tactics, Assistant to the Commandant
KENNEY R. HELTON, Sergeant, U. S. Army—
Instructor of Military Science and Tactics, Assistant to the Commandant
FRANK M. LASNICK, Sergeant, U. S. Army—
Instructor of Military Science and Tactics, Assistant to the Commandant
RICHARD JOHNSTONE BISCHOFF—*Graduate Assistant, Chemistry*
ROBERT GRAHAM FORSYTHE, B.S.—*Graduate Assistant, Chemistry*
MAYNARD HILL, A.B.—*Graduate Assistant, Chemistry*
JAMES HARVEY HOBSON, B.S.—*Graduate Assistant, Chemistry*
WILLIAM AUGUSTUS MCINTOSH—*Graduate Assistant, Chemistry*
WILLIAM WALKER PARKINSON, A.B.—*Graduate Assistant, Chemistry*
NICHOLAS STEPHEN PARTHEMOS, A.B.—*Graduate Assistant, Chemistry*
TAZE LEONARD SENN, B.S. —
Graduate Assistant, Botany and Bacteriology
NATHAN LOUGHBOROUGH TURNER, B.S. —
Graduate Assistant, Botany and Bacteriology
KURT MUELLER —*Graduate Assistant, Modern Languages*
DAVID LEROY PARROTT, B.S.—*Graduate Assistant, Architecture*
IRENE JULIAN, R.N.—*Drug Nurse and Dietician*
MYRTLE DEAN—*X-Ray and Laboratory Technician*
JOSEPH M. GLASCOCK, R.N.—*General Nursing*
GLADYS MITCHELL, R.N.—*Assistant Nurse*
VIRGINIA HAYNES—*Assistant Nurse*
SAPHRONIA DEAN, R.N.—*Assistant Nurse and Assistant Dietician*
BLANCHE F. GLASCOCK—*Secretary to the College Surgeon*
DAVID J. WATSON, B.S.—*Supt. of Campus, Roads and Buildings*
JAMES DOUGLAS HARCOMBE—*Mess Officer*
PRESTON BROOKS HOLTZENDORFF, JR., L.L.B.—*General Secretary, Y. M. C. A.*
JOHN ROY COOPER, B.S.—*Associate Secretary, Y. M. C. A.*
JOHN K. GOODE, A.B.—*Pastor Baptist Church*
JOHN ADAMS PINCKNEY, B.D.—*Rector, Episcopal Church*
SYDNEY, J. L. CROUCH, B.D., Th.D.—*Pastor, Presbyterian Church*
DAVID ARTHUR CLYBURN, A.B., B.D.—*Pastor, Methodist Church*
THOMAS F. TIERNEY, D.D.—*Pastor, St. Andrews Catholic Church*

AGRICULTURAL EXPERIMENT STATION STAFF

Board of Control

HONORABLE SAM H. SHERARD.....Ninety Six
HONORABLE W. W. BRADLEY, *Ex-Officio*.....Columbia
HONORABLE T. B. YOUNG.....Florence
*HONORABLE A. F. LEVER.....Columbia
HONORABLE PAUL SANDERS.....Ritter
HONORABLE F. E. COPE.....Cope
HONORABLE R. M. COOPER.....Columbia
HONORABLE J. B. DOUTHIT.....Pendleton

R. F. POOLE, PH.D., D.Sc.....*President*
H. P. COOPER, PH.D.....*Director*
R. A. MCGINTY, A.M.....*Vice-Director*

Agricultural Economics and Rural Sociology

G. H. Aull, Ph.D.....Agricultural Economist
W. T. Ferrier, Ph.D.....Associate Agricultural Economist
D. R. Jenkins, Ph.D.....Assistant Rural Sociologist
J. D. Kinard, M.S.....Assistant Rural Sociologist
M. J. Peterson, Ph.D.....Assistant Agricultural Economist
**Ernest Riley, B.S.....Assistant Agricultural Economist
J. M. Stepp, Ph.D.....Research Specialist in Rural Industries
H. A. White, B.S.....Assistant Agricultural Economist

Agronomy

H. P. Cooper, Ph.D.....Agronomist
W. R. Paden, Ph.D.....Agronomist
Frank Moser, Ph.D.....Associate Agronomist
G. B. Killinger, Ph.D.....Associate Soil Scientist
H. T. Polk, Ph.D.....Associate Agronomist
J. W. Jones, M.S.....Assistant Agronomist
H. A. Einstein, Ph.D.....Hydraulic Engineer
G. B. Nutt, M.S.....Associate Agricultural Engineer
G. H. Dunkelberg, M.S.....Assistant Agricultural Engineer
W. N. McAdams, M.S.....Assistant Agricultural Engineer

Animal Husbandry

L. V. Starkey, M.S.....Animal Husbandman
E. G. Godbey, B.S.....Associate Animal Husbandman
G. W. Anderson, D.V.M., M.S.....Associate Animal Pathologist

Botany and Bacteriology

G. M. Armstrong, Ph.D.....Botanist and Plant Pathologist
W. B. Aull, B.S.....Associate Bacteriologist
C. H. Arndt, Ph.D.....Associate Botanist and Plant Pathologist
W. B. Albert, Ph.D.....Associate Plant Physiologist

*Deceased.
**In cooperation with the United States Department of Agriculture.

C. C. Bennett, B.S.---Assistant in Botany
*Richard Weindling, Ph.D.---Agent
*B. S. Hawkins, B.S.---Agent
*G. W. Boozer, Jr., B.S.---Agent
*H. M. Crouch, B.S.---Agent
*W. B. Keller, B.S.---Agent

Chemistry

J. H. Mitchell, M.S.---Chemist
E. J. Lease, Ph.D.---Associate Chemist
D. B. Roderick, B.A.---Assistant Chemist

Dairy

J. P. LaMaster, M.S.---Dairyman
G. H. Wise, Ph.D.---Associate Dairyman
P. G. Miller, Ph.D.---Associate Dairyman
H. A. Johnson, B.S.---Assistant in Dairying

Entomology

Franklin Sherman, M.S.---Entomologist
O. L. Cartwright, M.S.---Associate Entomologist
W. M. Upholt, Ph.D.---Assistant Entomologist

Home Economics

Ada M. Moser, M.S.---Home Economist in Charge
Mary E. Frayser, M.A.---Home Economist

Horticulture

A. M. Musser, B.S.---Horticulturist
J. B. Edmond, Ph.D.---Associate Horticulturist
W. T. Brightwell, M.S.---Assistant Horticulturist
L. O. Van Blaricome, M.S.---Assistant in Horticultural Manufactures

Farms

C. S. Patrick, B.S.---Head Farms Department

Poultry

C. L. Morgan, M.S.---Poultryman
R. C. Ringrose, Ph.D.---Assistant Poultry Husbandman

Publications

A. B. Bryan, B.Litt.---Agricultural Editor
J. E. McCurry, B.S.---Bulletin Clerk

Veterinary

R. O. Feeley, D.V.S.---Veterinarian

*In cooperation with the United States Department of Agriculture.

Coast Station
Summerville, South Carolina

E. D. Kyzer, B.S.---Superintendent
*R. L. Jones, B.S.---Agent

Pee Dee Station
Florence, South Carolina

E. E. Hall, M.S.---Superintendent
*W. H. Jenkins, B.S.---Associate Agronomist
*F. F. Bondy, B.S.---Assistant Entomologist
*C. F. Rainwater, B.S.---Assistant Entomologist
*Norman Allen, M.S.---Assistant Entomologist
Frank Harrell---Research Assistant
*J. D. McCown---Agent
*J. F. Bullock, M.S.---Assistant Agronomist
*D. C. Harrell, B.S.---Junior Agronomist
*W. H. Rumff, B.S.---Agent
*T. W. Graham, M.S.---Agent
*J. R. Mattison, B.S.---Agent

Sandhill Station
R. 5, Columbia, South Carolina

J. A. Riley, M.S.---Superintendent
**L. E. Scott, M.S.---Assistant Horticulturist
R. W. Wallace, B.S.---Assistant Agronomist
*Nelson McKaig, M.S.---Associate Soil Technologist
*S. L. Cathcart, B.S.---Agent
*E. M. Roller, Ph.D.---Assistant Chemist
*W. A. Carns---Agent

Truck Station
Post Office Box 337
Charleston, South Carolina

W. C. Barnes, Ph.D.---Superintendent
**J. M. Jenkins, Jr., M.S.---Assistant Horticulturist
*W. J. Reid, Jr., B.S.---Assistant Entomologist
C. N. Clayton, Ph.D.---Assistant Plant Pathologist

Edisto Station
Blackville, South Carolina

W. B. Rogers, B.S.---Superintendent
R. L. Smith, M.S.---Assistant Agronomist
C. J. Nusbaum, Ph.D.---Assistant Plant Pathologist
J. G. Watts, M.S.---Assistant Entomologist
O. B. Garrison, Ph.D.---Assistant Horticulturist

Crop Pest Commission

G. M. Armstrong, Ph.D.---State Pathologist
Franklin Sherman, M.S.---State Entomologist
J. A. Berly, B.S.---Assistant State Entomologist
M. B. Stevenson, B.S.---Assistant State Pathologist

Fertilizer Inspection and Analysis

B. D. Cloaninger, B.S.---Head of Department
B. F. Robertson, B.S.---Consulting Toxicologist
H. J. Webb, Ph.D.---Chemist and Toxicologist
J. T. Foy, B.S.---Chemist
E. E. Leslie, B.S.---Assistant Chemist
**C. H. Hollis, B.S.---Assistant Chemist
M. M. Phillippe, M.S.---Assistant Chemist
N. R. Page, B.S.---Assistant Chemist

*In cooperation with the United States Department of Agriculture.
**On leave

LIVESTOCK SANITARY WORK STAFF

COLUMBIA, SOUTH CAROLINA

W. K. Lewis, V.S., M.D.V.---State Veterinarian and Director

R. A. Mays, B.Sc., D.V.M.---Assistant State Veterinarian
Jack Scott, D.V.M.---Assistant State Veterinarian
E. T. Fisher, D.V.M.---Assistant State Veterinarian
F. K. Peterson, D.V.M.---Assistant State Veterinarian
W. R. Chastain, D.V.M.---Assistant State Veterinarian
J. G. McKee, D.V.M.---Assistant State Veterinarian
H. B. Hood, V.M.D.---Assistant State Veterinarian
S. M. Witherspoon, B.Sc., D.V.M.---Assistant State Veterinarian
I. R. Cooper, D.V.M.---Assistant State Veterinarian
R. L. Willis, D.V.M.---Assistant State Veterinarian
William Ginn, D.V.M.---Assistant State Veterinarian

N. J. Ayers, D.V.M.---Deputy State Veterinarian, Greer
W. A. Barnette, B.Sc., D.V.M.---Deputy State Veterinarian, Greenwood
M. R. Blackstock, D.V.S.---Deputy State Veterinarian, Spartanburg
T. L. Burriss, D.V.M.---Deputy State Veterinarian, Anderson
F. P. Caughman, Sr., B.Sc., V.M.D.---Deputy State Veterinarian, Columbia
F. P. Caughman, Jr., D.V.M.---Deputy State Veterinarian, Columbia
J. T. Dickson, D.V.M.---Deputy State Veterinarian, Rock Hill
H. L. Frieze, D.V.M.---Deputy State Veterinarian, Gaffney
S. P. Galphin, B.Sc., D.V.M.---Deputy State Veterinarian, Bennettsville
C. C. Harmon, B.Sc., D.V.M.---Deputy State Veterinarian, Columbia
Carlos Helms, D.V.M.---Deputy State Veterinarian, Darlington
L. J. Hogan, D.V.M.---Deputy State Veterinarian, Charleston
O'Neal Jacobs, D.V.M.---Deputy State Veterinarian, Laurens
T. B. Jacobs, D.V.M.---Deputy State Veterinarian, Newberry
T. J. Kinard, D.V.M.---Deputy State Veterinarian, Ninety Six
Don O. Kitchen, D.V.M.---Deputy State Veterinarian, Greenville
F. E. Kitchen, D.V.M.---Deputy State Veterinarian, Greenville
G. R. Kitchen, D.V.M.---Deputy State Veterinarian, Sumter
W. R. Latta, D.V.M.---Deputy State Veterinarian, Orangeburg
G. J. Lawhon, B.Sc., D.V.M.---Deputy State Veterinarian, Hartsville
J. S. Lide, D.V.M.---Deputy State Veterinarian, Newberry
W. D. McCormack, D.V.M.---Deputy State Veterinarian, Conway
B. C. McLean, V.M.D.---Deputy State Veterinarian, Aiken
W. K. Magill, B.Sc., D.V.M.---Deputy State Veterinarian, Chester
A. S. Moore, D.V.M.---Deputy State Veterinarian, Walterboro
J. H. Moore, D.V.M.---Deputy State Veterinarian, Charleston
J. H. Morse, V.M.D.---Deputy State Veterinarian, Sumter
B. K. McInnes, M.D., V.M.D.---Deputy State Veterinarian, Charleston
M. J. Rattray, Jr., D.V.M.---Deputy State Veterinarian, Anderson
R. R. Salley, D.V.M.---Deputy State Veterinarian, Orangeburg
R. O. Suddath, B.S.A., V.M.D.---Deputy State Veterinarian, Walhalla
H. L. Sutherland, D.V.M.---Deputy State Veterinarian, Union
B. C. Talley, B.Sc., D.V.M.---Deputy State Veterinarian, Bennettsville
E. R. VanDeGrift, Jr., D.V.M.---Deputy State Veterinarian, Columbia

AGRICULTURAL EXTENSION STAFF

R. F. Poole, Ph.D., D.Sc.---*President*
D. W. Watkins, B.S., M.A.---*Director*
T. W. Morgan, B.S., M.S.---*Assistant Director*
G. C. Meares, B.S.---*Assistant to the Director*
C. M. Hall---*Chief Clerk and Accountant*

Agricultural Economics

O. M. Clark, B.S., M.S.
Extension Economist and Farm Management Specialist, Clemson
M. C. Rochester, B.S., M.S.---Farm Management Specialist, Clemson
P. S. Williamon, B.S.---Assistant Farm Management Specialist, Clemson
D. C. Sturgis, B.S., M.S.---Assistant Extension Economist, Clemson
M. H. Sutherland, B.S.---Assistant Extension Economist, Clemson
A. V. Bethea, B.S.---Assistant Extension Economist, Clemson
W. L. Abernathy, B.S.---Supervisor Test-Demonstration Farms, Clemson
N. R. Davis, B.S.---Assistant in Program Planning, Clemson

Agricultural Engineering

C. V. Phagan, B.S.---Agricultural Engineer, Clemson
G. H. Stewart, B.S., M.S.---Assistant Agricultural Engineer, Clemson
E. C. Turner, B.S.---Extension Soil Conservationist, Clemson
M. C. McKenzie, B.S.---Assistant to the Agricultural Engineer, Clemson

Agronomy

H. A. Woodle, B.S.---Agronomist, Clemson
B. E. G. Prichard, B.S.---Assistant Extension Agronomist, Clemson
H. A. McGee---Tobacco Specialist, Florence
C. G. Peebles, B.S.---Soils Specialist, Clemson

Animal Husbandry

J. R. Hawkins, B.S., M.S.---In Charge Livestock Extension, Columbia
A. L. DuRant, B.S., M.S.---Livestock Specialist, Florence

Boys' 4-H Club Work

I. D. Lewis, B.S., M.S.---State Boys' Club Agent, Clemson
L. O. Clayton, B.S.---Assistant State Boys' Club Agent, Clemson
O. R. Smith, B.S.---Assistant State Boys' Club Agent, Clemson

Dairying

C. G. Cushman, B.S.---Dairy Specialist in Charge, Clemson
Vance Henry, B.S.---Dairy Specialist, Clemson

Entomology and Plant Pathology

W. C. Nettles, B.S., M.S.
Extension Entomologist and Plant Pathologist, Clemson
E. S. Prevost---Specialist in Beekeeping, Clemson

Forestry

M. H. Bruner, B.S., M.F.---Extension Forester, Clemson
C. R. Ross, B.S., M.F.---Assistant Extension Forester, Clemson

Horticulture

E. H. Rawl, B.S., M.S.---Extension Horticulturist in Charge, Clemson
A. E. Schilletter, B.S.---Extension Horticulturist, Clemson

Marketing

G. E. Prince, B.S.---Chief, Marketing Division, Columbia
T. A. Cole, B.S.---Agent in Marketing, Columbia
E. H. Talbert, B.S.---Specialist in Grading and Packing, Columbia

Poultry

P. H. Gooding, B.S., M.S.---Extension Poultryman, Clemson
J. W. Matthews, B.S.---Assistant Extension Poultryman, Clemson

Printing and Distribution of Publications

A. B. Bryan, B.S., B.Litt.---Agricultural Editor, Clemson

Visual Instruction

G. C. Meares, B.S.---In Charge of Division, Clemson
L. W. Riley,---Assistant in Visual Instruction, Clemson
W. C. Bryan, Jr., B.S.---Assistant in Visual Instruction, Clemson

DISTRICT AGENTS

First District	L. B. Massey, B.S.	Box 266, Spartanburg
Second District	J. T. Lazar, B.S.	Florence
Third District	A. H. Ward, B.S.	Aiken

COUNTY AGRICULTURAL AGENTS

County	*Name*	*Post Office*
Abbeville	Z. D. Robertson, A.B.	Abbeville
Aiken	F. W. Corley, B.S.	Aiken
Allendale	W. H. Pressly, B.S.	Allendale
Anderson	E. P. Josey, B.S.	Anderson
Bamberg	W. H. Craven, B.S.	Bamberg
Barnwell	D. A. Shelley, B.S. (Acting)	Barnwell
Beaufort	J. E. Youngblood, B.S.	Beaufort
Berkeley	J. H. Harvey, B.S.	Moncks Corner
Calhoun	E. B. Baskin, B.S.	St. Matthews
Charleston	C. W. Carraway, B.S.	Charleston
Cherokee	S. C. Stribling, B.S.	Gaffney
Chester	M. C. Crain, B.S.	Chester
Chesterfield	J. C. Willis, B.S.	Chesterfield
Clarendon	F. M. Rast, B.S., M.S.	Manning
Colleton	L. W. Alford, B.S.	Walterboro
Darlington	J. W. Talbert, B.S. (Acting)	Darlington
Dillon	S. W. Epps, B.S.	Dillon
Dorchester	J. M. Lewis, B.S., (Acting)	St. George
Edgefield	J. F. Jones, B.S.	Edgefield
Fairfield	R. H. Lemmon, B.S.	Winnsboro
Florence	J. W. McLendon, B.S.	Florence
Georgetown	M. M. McCord, B.S.	Georgetown
Greenville	W. R. Gray, B.S.	Greenville
Greenwood	R. D. Steer, B.S.	Greenwood
Hampton	J. C. Anthony, B.S.	Hampton
Horry	V. M. Johnston, B.S.	Conway
Jasper	E. C. Abrams, B.S.	Ridgeland
Kershaw	W. C. McCarley, B.S.	Camden
Lancaster	F. W. Cannon, B.S.	Lancaster
Laurens	C. B. Cannon, B.S.	Laurens
Lee	J. C. McComb, B.S.	Bishopville
Lexington	R. R. Mellette, B.S.	Lexington
McCormick	M. A. Bouknight, B.S.	McCormick
Marion	W. R. Wells, Jr., B.S.	Marion
Marlboro	Colin McLaurin, B.S.	Bennettsville
Newberry	P. B. Ezell, B.S.	Newberry
Oconee	G. H. Griffin, B.S.	Walhalla
Orangeburg	R. D. Suber, B.S.	Orangeburg
Pickens	T. A. Bowen, B.S.	Pickens
Richland	D. R. Hopkins, B.S.	Columbia
Saluda	Claude Rothell, B.S.	Saluda
Spartanburg	W. H. Stallworth, B.S.	Spartanburg
Sumter	J. M. Eleazer, B.S.	Sumter
Union	T. B. Lee, B.S.	Union
Williamsburg	R. A. Jackson, B.S.	Kingstree
York	L. W. Johnson, B.S.	Rock Hill
County Agent at Large	H. G. Boylston, B.S.	Barnwell
Extension—AAA Agent	J. M. Napier, B.S., M.S.	Darlington
Assistant to District Agent	R. H. Crouch, B.S.	Spartanburg

ASSISTANT COUNTY AGRICULTURAL AGENTS

County	*Name*	*Post Office*
Aiken	C. P. Guess, B.S.	Aiken
Anderson	T. A. Stallworth, B.S.	Anderson
Barnwell	H. A. Bowers, B.S.	Barnwell
Chester	D. H. Caughman, B.S.	Chester
Chesterfield	J. M. Jeter, B.S.	Chesterfield
Florence	J. C. King, B.S.	Florence
Greenville	J. D. Miller, B.S.	Greenville
Greenwood	T. M. Clyburn, B.S.	Greenwood
Horry	J. C. Shelley, B.S.	Conway
Newberry	J. L. King, B.S.	Newberry
Orangeburg	D. Richardson, B.S.	Orangeburg
Pickens-Oconee	J. R. Wood, B.S.	Pickens
Richland	R. H. Lemmon, Jr., B.S.	Columbia
Spartanburg	W. J. Martin, B.S.	Spartanburg
Sumter	T. O. Bowen, B.S.	Sumter
Williamsburg	D. K. Josey, B.S.	Kingstree
York	B. J. Funderburk, B.S.	Rock Hill

NEGRO AGRICULTURAL AGENTS

H. E. Daniels, District Agent, State College, Orangeburg, S. C.

County	*Name*	*Post Office*
Aiken	George T. Dowdy	Aiken
Anderson	J. A. Gresham	Anderson
Beaufort	Benjamin Barnwell	Beaufort
Chester	Waymon Johnson	Chester
Clarendon	Wm. Thompson	Manning
Darlington	S. C. Disher	Darlington
Fairfield	D. G. Belton, Jr.	Winnsboro
Florence	H. S. Person	Florence
Greenville	Robt. W. Anderson	Greenville
Greenwood	L. V. Walker	Greenwood
Kershaw	J. D. Marshall	Camden
Marion	R. C. Bacote	Marion
Orangeburg	G. W. Daniels	Orangeburg
Richland	J. E. Dickson	Columbia
Spartanburg	W. C. Bunch	Spartanburg
Sumter	Jason Maloney	Sumter
Union	E. N. Williams	Union
Williamsburg	Van Buren Thomas	Kingstree
York	Booker T. Miller	Rock Hill

Note: All negro agents have B.S. Degrees from State College at Orangeburg, or the equivalent from other institutions.

HOME DEMONSTRATION EXTENSION DEPARTMENT

The United States Department of Agriculture, Clemson College and Winthrop College Working in Cooperation

---

LONNY I. LANDRUM, B.S.---State Home Demonstration Agent, Rock Hill
HARRIETTE B. LAYTON---Assistant Home Demonstration Agent, Rock Hill
BESSIE HARPER, B.A.---District Agent, Aiken
THEODOSIA DARGAN PLOWDEN---District Agent, Route 3, Sumter
JUANITA NEELY, B.A., M.S.---District Agent, Rock Hill
DORA DEE WALKER, B.A.--Production and Conservation Specialist, Appleton
HARRIET F. JOHNSON, B.A., B.S., M.A.---State Girl's Club Agent, Rock Hill
JANE KETCHEN, B.S.---Marketing Specialist, Rock Hill
ELIZABETH WATSON, B.S.---Clothing Specialist, Rock Hill
MARTHA BUTTRILL, B.S., M.S.---Extension Nutritionist, Rock Hill
ELEANOR CARSON, B.A.---Poultry Specialist, Rock Hill
PORTIA SEABROOK, B.A.---Home Management Specialist, Rock Hill

---

COUNTY HOME DEMONSTRATION AGENTS

County	*Name*	*Post Office*
Abbeville	Elizabeth Herbert, A.B.	Abbeville
Aiken	Ann Elizabeth Monroe, B.S.	Aiken
Aiken	Florence S. Padgett, B.S. (Asst. Agent)	Aiken
Allendale	Mamie Sue Hicks, B.S.	Allendale
Anderson	Ella Burton, B.S.	Anderson
Anderson	Ellen Atkinson, B.S. (Asst. Agent)	Anderson
Bamberg	Marie Lambert, B.S.	Bamberg
Barnwell	Elizabeth McNab, A.B.	Barnwell
Beaufort	Mary Ellen Eaves, A.B., B.S.	Beaufort
Berkeley	Elizabeth D. Boykin, A.B.	Moncks Corner
Calhoun	Lula Chriesman	St. Matthews
Charleston	Caroline S. Alston	Charleston
Cherokee	Eloise Johnson, B.S.	Gaffney
Chester	John'gy Richards, B.S.	Chester
Chesterfield	Kerby Tyler	Chesterfield
Clarendon	Carrie Carson, B.S.	Manning
Colleton	Isobel Patterson, B.S.	Walterboro
Darlington	Emmie J. Evans	Darlington
Dillon	Etta Sue Sellers, B.A.	Dillon
Dorchester	Ophelia Barker, B.S.	St. George
Edgefield	Laura Mellette, B.S.	Edgefield
Fairfield	Lila Moore, B.S.	Winnsboro
Florence	Nancy Hinson, B.S.	Florence
Florence	Jeanne E. Wilson, B.S. (Asst. Agent)	Lake City
Georgetown	Vela Smith, B.S.	Georgetown
Greenville	Julia W. Stebbins	Greenville
Greenville	Beatrice Mabry, B.S.	Greenville
Greenwood	Carolyn Avinger, B.S.	Greenwood
Hampton	Izora Miley	Hampton

Horry	Margaret Cloud	Conway
Jasper	Gertrude Lanham, B.S.	Ridgeland
Kershaw	Margaret Fewell, B.A.	Camden
Lancaster	Jennie Robinson, B.S.	Lancaster
Laurens	Jennie E. Coleman	Laurens
Lee	Sallie Pearce	Bishopville
Lexington	Mattie Lee Cooley, A. B., B.S.	Lexington
McCormick	Matilda Bell, B.S.	McCormick
Marion	Hazel Smith, B.S.	Marion
Marlboro	Janie McDill, B.A., B.S.	Bennettsville
Newberry	Ethel Counts, B.A.	Newberry
Oconee	Mary C. Haynie, B.A.	Walhalla
Orangeburg	Louise Fleming	Orangeburg
Orangeburg	Harry D. Thompson, B.S. (Asst. Agent)	Orangeburg
Pickens	Sarah G. Cureton, B.S.	Pickens
Richland	Winnie Belle Holden, B.A.	Columbia
Saluda	Pearle Calvert	Saluda
Spartanburg	Kate M. Hooper	Spartanburg
Sumter	Jean Reid, B.S.	Sumter
Sumter	Mary E. Wright, B.S. (Ass't. Agent)	Sumter
Union	Mahala J. Smith	Union
Williamsburg	Laura Conner, B.S.	Kingstree
York	Margaret Martin, B.S.	Rock Hill

NEGRO HOME DEMONSTRATION AGENTS

Marion B. Paul, State Supervisor Negro Home Demonstration Work, State College, Orangeburg, S. C.

County	*Negro Agents' Names*	*Address*
Aiken	Mabel L. Skelton	Aiken
Allendale	Annie Mae Jones	Allendale
Beaufort	Willie Mabel Price	Frogmore
Charleston	Albertha DeVeaux	Charleston
Dorchester	Mattie E. Overstreet	St. George
Fairfield	Gwendolyn Chishom	Winnsboro
Florence	Lillian Brown	Florence
Georgetown	Rosa G. Gadsden	Georgetown
Greenville	Delphenia Wilkerson	Greenville
Kershaw	Susie Bivens	Camden
Marlboro	Minnie Gandy	Clio
Newberry	Laura Manney	Newberry
Orangeburg	Rosa Reed	Orangeburg
Richland	Frances Thomas	Columbia
Spartanburg	Marie D. Blakemon	Spartanburg
Sumter	Janie Rucker	Sumter

Note: All negro Home Demonstration Agents have had college training in home economics.

PART II—INFORMATION

REQUIREMENTS FOR ADMISSION

General. All applicants for admission to Clemson College must be at least sixteen years of age and at the time of entrance must be free from contagious or infectious disease. A certificate of good moral character and honorable discharge from the last school attended is required. A reservation deposit of $5.00 is required of both old and new students. This fee must accompany the "Matriculation Card" which is sent all students who have met the requirements for enrollment in the College.

Application Blanks. Blanks to be used in applying for admission may be obtained from the Registrar, Clemson College, Clemson, South Carolina.

Admission by Certificate. Graduates from accredited high schools should submit for consideration a certificate of graduation and a transcript of all high school units completed as soon as possible after graduation from high school. A preliminary transcript is unnecessary and will not take the place of a complete transcript.

The requirements for admission by certificate include graduation from an accredited high school with at least sixteen units. Of the units presented for admission, at least three must be in English, two and one-half in mathematics, and one in social science. The units in mathematics should include as much work as possible in algebra and geometry since a knowledge of these subjects forms a necessary background for the mathematics required in the freshman class.

Admission by Examination. Students who do not meet the requirements given above may be admitted to the college by passing the entrance examinations.

Admission by Certificate and Examination. Applicants who are not graduates of accredited high schools, but who can give acceptable documentary evidence of having completed the equivalent of a high-school course under formal instruction, will be required to pass examinations on English, mathematics, and history.

Admission to Advanced Standing. Work that has been taken in other colleges will be credited for an equivalent amount of work so far as it applies to any course offered in the College. The applicant must present: (a) a letter of honorable dismissal from the institution last attended, and (b) an official transcript of his record, including entrance credits. College credits given by transfer are provisional and may be cancelled at any time if the student's work is unsatisfactory. A student coming from another institution must spend at least one regular session in the College before he is eligible to apply for a degree.

Matriculation. Students upon arrival at the College at the opening of the session must report at once to the Registrar's Office. New students will be directed in the procedure necessary to complete their enrollment. A student's matriculation with the College is equivalent to his pledge to conform to the rules of the institution. Any admission gained or matriculation made irregularly is subject to cancellation.

EXPENSES

Settlement of College Fees. The Treasurer of the College is the financial officer and all transactions relating to payments must be conducted through him. The entrance payment includes the full cost of uniform plus fees and living expenses for the first quarter and must be made before a student can be assigned to a room in barracks or permitted to begin work. Other payments are due as indicated. Remittances should be made in cash, money order, cashier's check, or by local check *made payable to S. W. Evans, Treasurer. All remittances made by mail must be addressed to: The Treasurer, Clemson College, Clemson, S. C.* A personal check which is given in payment of dues and is returned by the bank unpaid automatically cancels a student's reservation and automatically drops from class rolls a student who is in school.

Expenses: Considering the standard of living and quality of instruction, Clemson is one of the most economical colleges in the country. Based on conditions in 1940-1941 the cost to South Carolina students for board, laundry, room, hospital, other fees, and tuition (but not uniform) is $313.55 for the session. The

legal residence of the parent, or guardian, determines the tuition status of the student. Students from other states pay $200.00 for non resident tuition. This is $140.00 in addition to the $60.00 paid by South Carolina students. The Treasurer is required to collect in full the amounts due on dates specified. The expenses are due in four installments as indicated below.

On account of rising markets, it may be necessary at any time to raise the cost of living expenses.

Uniform: The total cost of complete new uniform required for Freshmen, or new students, for 1941-1942 will be approximately $79.04. Students in upper classes use serviceable uniform articles on hand. The cost of uniform for upperclassmen for the 1941-1942 session will be $26.49.

The payments at entrance to cover board, laundry, room, hospital, other fees, tuition, *and uniform* for first quarter of session 1941-1942 will be approximately as follows:

First Quarter	South Carolina Students	Non Resident Students
New Students	$167.59	$202.59
Old Students	115.04	150.04

Subsequent payments for students in all classes are to be paid according to the following schedule:

Payment	Date Due	South Carolina Students	Non Resident Students
Second Quarter	November 20, 1941	$75.00	$110.00
Third Quarter	February 2, 1942	75.00	110.00
Fourth Quarter	April 3, 1942	75.00	110.00

Any uniform allowance made to R. O. T. C. students by the Federal Government will be credited to the individual's dues for the Fourth Quarter, when the full amount of the com-

mutation is received by the College. This Commutation for 1940-1941 is as follows: Freshmen, $9.00; Sophomores, $9.00; Juniors, $29.00; Seniors, $7.00. R. O. T. C. commutation payments for subsistence are made by the Government directly to the student, and amount to 25c per day for juniors and seniors.

Note: The expenses given above are for regular cadets who live in the dormitories. Under certain regulations, and with the approval of the President, a student may become a Day Cadet or Day Student. A Day Cadet is a member of the corps who rooms and boards outside of barracks. A Day Student is a member of the student body who is not a member of the cadet corps.

Refunds: Refunds will be made under the following rules:

1. A refund of *all* moneys, except matriculation fee of $3.00 and $1.00 per day for board, etc., will be made for a student who withdraws from College within ten days of the date of his matriculation, with the provision that the refund for uniform cannot be guaranteed for items tailored to individual measure.

2. A refund of moneys collected for board, laundry, and barracks heat, light, and water at the rates charged will be made for a student who withdraws subsequent to the first ten days after matriculation. This also applies to interruptions exceeding fifteen days, not including holiday periods.

3. A refund of moneys collected for uniform will be made for a student who withdraws from College on articles issued to him and returned unused, except garments tailored to measure; and on articles for which he has paid but which have not been issued to him, except articles tailored to measure which are in process of manufacture.

4. A refund for a student will be made to his parents, or guardian, except that for uniform cancellation approved by the Commandant, which refund will be made direct to the student.

5. The College will not be liable for articles lost or stolen in the barracks.

6. The College will not be liable for lost or damaged laundry unless reported within two days after the date upon which the laundry was due to be delivered, and then not more than the actual depreciated value of such articles as have been lost or damaged.

Student Banking Accounts. For the conveniences of students the College operates a banking department in the Treasurer's office where money can be deposited and withdrawn as the occasion may demand. This service is purely local. Students are urged to deposit their money in the bank and not to keep it in their rooms.

Books and Supplies. The L. C. Martin Drug Co., Inc., conducts a store near the campus and maintains a book and supply store where students may purchase textbooks, drawing instruments, and other supplies. A complete list of the textbooks used in each course, together with their prices will be furnished on application to the book store.

Each student will be required to own his textbooks and necessary equipment. All students shall submit their textbooks and other equipment for inspection at such times as are ordered.

Optional Expenses. It is not possible to give an estimate of a student's expenditures for such amusements as dancing, moving pictures, etc. This depends largely upon the disposition of the young man. The College endeavors to reduce to a minimum the temptation to spend money needlessly, but the authorities cannot be responsible for a student's private expenditures. This must be a matter between him and his parents.

Transcripts. Official transcripts of scholastic records are not issued to students who have not been graduated. However, a transcript will be sent to any insitution or other recognized rating agency upon request. One transcript is furnished free; additional copies are issued for one dollar each. Remittances for transcripts should be made payable to The Treasurer, Clemson

College, but should accompany transcript requests and should be mailed to The Registrar.

Student Aids. A number of young men secure positions as waiters in the mess hall, for which service they are paid at the rate of about eight dollars a month. These positions are filled by the Mess Officer, to whom all correspondence should be addressed. In addition to this help, membership in the Reserve Officers Training Corps entitles freshmen and sophomores to a small commutation on uniforms. Juniors and seniors receive also a ration commutation.

During the past few years the National Youth Administration of the Federal Government has provided funds for a limited number of part-time jobs for college students. Eligibility for these positions has been dependent upon the ability of the student to do high-grade college work and his inability to attend or continue in college without Federal help. The work done by N. Y. A. students has been the usual kind performed by students in the several college departments. No loan funds or scholarships have been provided by the Federal Government, but many N. Y. A. students have been able to earn $100 or more during the college session.

LOAN FUNDS

John Bryce Baskin Fund. Interest on $2,000 given by Cecil L. Reid, of the Class of 1902, as an appreciation of the aid given him by Mr. Baskin. This fund is "available to any resident of South Carolina but if all other things are equal, preference is to be given the boy or boys from York or Newberry Counties, South Carolina."

The William Wilson Finley Loan Fund. The sum of $1,000 has been deposited with the College to be used as a loan fund to students living in counties traversed by the Southern Railway or the Blue Ridge Railway.

The George Cherry Foundation. Mrs. Mary Cherry Doyle has donated $1,000 to aid worthy and needy students from Oconee County and that part of Anderson County including Pendleton. This fund is not available for first-year students.

The U. D. C. Loan Fund. The John C. Calhoun Chapter of the U. D. C. has created a fund of $500.00 to be loaned to lineal descendants of the Confederate veterans. This fund is limited to juniors and seniors.

Clemson Student Loan Association Fund. In the spring of 1930 President Sikes invited a number of interested teachers, officers, alumni, and friends of Clemson College to meet for the purpose of raising funds to be loaned to worthy Clemson students who were already in college. Many responded. Officers were elected; a constitution and by-laws adopted. Twelve hundred dollars has already been realized through gifts and annual membership dues, which are five dollars per year. There are seventy-six members. Anyone desiring to assist young men in this way should communicate with Mr. W. K. Livingston, Greenville, S. C., who is president of the organization, or Mr. J. C. Littlejohn, Business Manager, Clemson, S. C.

The College is in need of funds to lend worthy students. Donations for this or other purposes may be made to the Board of Trustees of Clemson College, or to the Trustees of the Clemson Alumni Foundation. The President of the College or the Secretary of the boards named above will be glad to communicate with any person who is interested in establishing such a fund.

ANDERSON FELLOWSHIP

The Alexander P. Anderson and the Lydia Anderson Fellowship. Mr. and Mrs. Anderson have given to the Clemson Agricultural College the sum of $10,000 for the purpose of establishing a fellowship fund. The income from this trust fund is to be used for the purpose of awarding a scholarship or fellowship to one or more Clemson graduates for advanced work in biological sciences including bacteriology and entomology. The scholarship is to be awarded annually by the faculty of the Clemson Agricultural College to an outstanding student. The name of the beneficiary is reported to the Board of Trustees, and an accounting of the funds by the Treasurer of the College is made annually.

SEARS ROEBUCK SCHOLARSHIPS

The Sears Roebuck Agricultural Foundation has made funds available for freshman agricultural scholarships at Clemson for the past several years. The amount available for the 1940-1941 session is $2450.

BUILDINGS AND GROUNDS

Buildings. The Administration Building houses the offices of the President, the Registrar, the Commandant, the Treasurer, the Business Manager, the Professor of Military Science and Tactics, and the Dean of the School of General Science. This building also has over twenty classrooms. At the north end of the building is Memorial Hall, the College Auditorium, with a seating capacity of about eighteen hundred.

The Library Building houses the main library of the college and the experiment station library. There are in the library approximately 28,000 books; 12,041 bound and unbound periodicals; 16,562 bound government, state, and experimental publications; 652,700 unbound government documents; and 26,000 pamphlets and clippings in the Subject File. The departmental libraries also contain a number of volumes pertaining especially to the work of the department concerned.

The instructional work of the institution is maintained largely in the departmental buildings. The Schools of Agriculture, Engineering, Textiles, Vocational Education, and Chemistry have individual buildings especially designed for their purposes. The School of General Science is located in the Administration Building. Certain laboratory work is conducted at the greenhouses, live stock barns, poultry plant, veterinary hospital, and other buildings on the college farm.

The cadet barracks consist of nine large brick buildings—five of which were constructed since 1935. All barracks are steam-heated, electrically-lighted, and supplied with hot and cold water. The eight hundred and fourteen rooms in the barracks

are furnished with single-width iron cots and other necessary equipment.

The Hospital, located about a quarter of a mile from the barracks, is a wooden building, especially designed for the purpose. The equipment includes a Victor X-ray machine, a new Burdick ultra-violet ray machine, and a sorensen machine of the latest design for ear, eye, nose, and throat treatments.

The Y. M. C. A. building is a four-story structure equipped with club rooms, lounge rooms, game rooms, and has in addition, thirty rooms available for permanent roomers, guests, and transients. Having an auditorium, gymnasium, and swimming pool, the Y. M. C. A. building is admirably fitted to serve as the center of social activities and voluntary religious work.

The Physical Education Building consists of a central office and dormitory section, a field house, and a gymnasium.

The Laundry, which is operated exclusively for the students, is a brick building, equipped with improved modern machinery.

The Clemson College Hotel, a frame building, is situated on a hill overlooking the campus. This building and numerous brick and frame residences furnish homes for a number of the college teachers and officers.

Fort Hill, the former home of John C. Calhoun, is located on the Clemson campus. In accordance with the provisions of Mr. Clemson's will, this residence has been made a shrine in honor of Mr. Calhoun. Several pieces of furniture and other interesting relics, formerly the property of Mr. Calhoun, are carefully preserved in this home, where they may be seen by visitors to the college.

Grounds. The college grounds comprise about 1,544 acres, including the campus, the farm, and the Experiment Station grounds. The two-hundred acre campus is laid out in walks, drives, and lawns, and is shaded by a beautiful grove of native forest trees.

LIVING CONDITIONS

At Clemson students live in barracks under military discipline. A student must at all times be present or accounted for. The barracks or dormitories are divided into "halls" for military purposes, a unit being assigned to a hall under the supervision of a cadet officer.

Cadet officers remain on duty both day and night at the guard room, in which is located a long-distance telephone with twenty-four hour service.

Each student room is equipped with necessary furniture. The beds are single width. Bed linen, bed covers, pillows, and towels must be furnished by the students.

All students are required to provide themselves with two mattress covers and two clothes bags. These are regulation articles and can be secured only at the College. One set will likely serve for use during the four years.

The dining hall, or mess hall, is located in Barracks No. 1. It is well equipped and is under the supervision of the mess officer. The kitchen and cold storage plant are among the best in the South. All students living in the barracks eat in the dining hall.

RESERVE OFFICERS' TRAINING CORPS

Under the provisions of the National Defense Act, the War Department has established at Clemson College an infantry unit of the Reserve Officers' Training Corps. All students of

the College, unless excused by the President, are required to take a minimum of three hours per week of military training. To be admitted to membership in the corps and to receive the privileges connected therewith, juniors and seniors must be recommended by the President and the Professor of Military Science and Tactics. All members at the completion of the junior class will be required to attend a summer camp, where their expenses will be paid by the Federal Government. After graduation the student may upon the recommendation of his instructors receive a commission in the Officers' Reserve Corps.

STUDENT HEALTH SERVICE

The Surgeon, who has complete charge of the hospital, is one of the regular officers of the College, and his special duty is to look after the health of the students.

At a specified time every day, students who desire may consult the Surgeon, and those who are admitted to the hospital are cared for by experienced nurses in the college hospital. In case of necessity students are allowed to consult the Surgeon at any time, or to send for him in an emergency.

The Surgeon cannot undertake to notify parents every time a student reports to the hospital for medicine, or for rest on account of some slight complaint. However, they may rest assured that they will be notified at once of sickness of any consequence.

The medical fee paid by each student is intended to cover all ordinary cases of sickness and their treatment. It is not intended to cover fees of doctors or specialists called into consultation, for performing operations, for special nurses, or for any medical or surgical attentions performed away from the College; and the College does not assume any responsibility for accidents that happen away from the College. Such expenses must be borne by the parents. The right of the College Surgeon, with the approval of the President of the College, to incur in

behalf of any student under his care any of these extra services is hereby expressly reserved.

The college swimming pool at Clemson is located in the Y. M. C. A. Swimming class, life saving, and instructor's courses are given. Members of the freshman and varsity swimming teams train here and many company swimming meets are scheduled. The pool is heated throughout the winter months and it is filtered and chlorinated with electric equipment.

Intramural athletics are encouraged and sponsored by the Physical Education Department and the Y. M. C. A. All of the companies with military organization and athletic officers have teams in such sports as basketball, volley ball, swimming, baseball, and soccer. These competitive games receive hearty support from many students and afford an opportunity for active participation. Practically all of the students at Clemson participate in some form of recreation or an intramural sport. Quite a number take part in many intramural sports. Participation is voluntary, but the majority of the students take advantage of this opportunity for wholesome recreation and physical direction under trained leadership.

RELIGIOUS INFLUENCES

Clemson cooperates with the various churches and the Y. M. C. A. in the religious training of its students. The Y. M. C. A. located on the campus, provides accommodations for all denominational groups not having church homes on the campus and is used a great deal by campus church groups, often because it is so convenient and accessible. Numerous union services and cooperating meetings of young peoples' societies of the campus churches and of the Y. M. C. A. Councils, and Cabinet afford a united front for religious services.

Five denominations: Baptist, Episcopal, Methodist, Presbyterian, and Roman Catholic, have erected churches in the community. Arrangements are made for services for students of other denominations. Sunday schools and young people's church

societies are maintained by the local churches. Attendance upon the services of these organizations is voluntary.

Courses in Religion, which are credited as free electives, are offered. This work is not financed by the College. For information regarding these courses see the description of courses.

HISTORICAL STATEMENT

In 1889, the General Assembly of South Carolina accepted the bequest of Thomas G. Clemson, which set aside the bulk of the Clemson estate for the founding of a scientific and technical college. The institution was also established under the Morrill Land-Grant Act passed by the National Congress in 1862. Clemson College, therefore, is the Agricultural and Mechanical College of South Carolina and is a member of the national system of Land-Grant Colleges and Universities.

The nature of the institution is outlined in Mr. Clemson's will and its acceptance by the legislature.

The will in part reads:

"Feeling a great sympathy for the farmers of this State, and the difficulties with which they have to contend in their efforts to establish the business of agriculture upon a proper basis, and believing that there can be no permanent improvement in agriculture without a knowledge of those sciences which pertain particularly thereto, I have determined to devote the bulk of my property to the establishment of an Agricultural College upon the Fort Hill Place. My purpose is to establish an Agricultural College which will afford useful information to the farmers and mechanics; therefore it should afford thorough instruction in agriculture and the natural sciences connected therewith; it should combine, if practicable, physical with intellectual education; and should be a high seminary of learning in which the graduate of the common

schools can commence, pursue and finish a course of studies terminating in thorough theoretic and practical instruction in those sciences and arts which bear directly upon agriculture. * * * * but to always bear in mind that the benefits herein sought to be bestowed are intended to benefit agriculture and mechanical industries. * * * * I trust I do not exaggerate the importance of such an institution for developing the material resources of the State, by affording its youth the advantages of scientific culture.

"The desire to establish such a school or college as I have provided for in my said last will and testament, has existed with me for many years past, and many years ago I determined to devote the bulk of my property to the establishment of an Agricultural School or College. To accomplish this purpose is now the one great desire of my life."

This will gave all that part of the Fort Hill Estate inherited by Mrs. Clemson from her mother and the bulk of Mr. Clemson's other real and personal property. The latter amounted to a sum, which, considering the purchasing power at the time, probably has been only a few times exceeded in a public benefaction in South Carolina.

A Board of Trustees of seven members was provided for: R. W. Simpson, D. K. Norris, M. L. Donaldson, R. E. Bowen, B. R. Tillman, J. E. Wannamaker, and J. E. Bradley, who with those chosen by the General Assembly should constitute a governing board in case the State accepted the bequest; but, who, in case the State declined the bequest, should alone constitute a governing board for a private institution.

These seven trustees, along with other friends of the movement, and the agricultural groups in the State developed and organized a public opinion favorable to the plan.

In November, 1889, the General Assembly of South Carolina accepted the terms of the will, and, following the decision of the United States Supreme Court to uphold the will, the

State of South Carolina and the full Board of Trustees proceeded to convert the dream of Thomas G. Clemson into the reality of Clemson College.

The College was formally opened in July, 1893, with an enrollment of 446 students. The first graduating exercises were held in December, 1896, with a graduating class numbering thirty-six—fifteen in the agricultural courses and twenty-one in the engineering courses.

LOCATION

The College is located on the Fort Hill homestead of John C. Calhoun, in the picturesque foothills of the Blue Ridge. It has an elevation of 800 feet above sea level and commands an excellent view of the mountains to the north and west, some of which attain an altitude of over five thousand feet.

The College is located at Clemson, S. C., which is one mile from Calhoun, a town on the main line of the Southern Railway, and four miles from Pendleton, on the Blue Ridge Railway. State Highways number 13 and 24 pass through Clemson, and daily bus service at regular intervals is available.

CLEMSON COLLEGE ALUMNI CORPORATION

The Alumni Corporation has established a permanent office on the campus. The office is in charge of a secretary, who is elected by the Board of Directors of the Corporation. The Clemson office is a clearing house for all matters concerning the alumni. In addition to keeping accurate records of addresses and information concerning alumni, the Corporation has established at the Clemson headquarters, a bureau for repairing Clemson class rings, and for securing duplicates of these rings.

The Corporation holds its regular annual meeting at the College on Saturday of Commencement. At this meeting all officers are elected. The Secretary is elected by the Board of Directors which is in turn responsible to the general Corporation for the conduct of its business. The purpose of the Alumni Corporation is to serve the College and the alumni in every possible way. All correspondence regarding its affairs is conducted through the Clemson office.

Graduates and former students are requested to keep the Alumni Office informed as to changes of address, occupation, and other matters that will be of interest to those in charge of Alumni Records and mailing lists.

PART III—STUDENT LIFE AND ACTIVITIES

CADET MILITARY ORGANIZATION

Clemson College is operated as a military school,—not for the purpose of making soldiers, but in order that the students may learn the importance of loyalty and obedience to authority, and acquire the habit of being courteous, systematic, and punctual.

The military system places every student on an equal standing. All cadets wear the uniform, live under the same conditions, and are subject to the same privileges and restraints.

The military system does not in any way interfere with the regular college work, but on the other hand enables it to maintain a higher level of efficiency. Military training is a feature that gives to Clemson's graduates an advantage which is an important factor in their future progress and success.

CLUBS AND SOCIETIES

Honor Fraternities. Honor scholarship organizations, including Tau Beta Pi, Sigma Tau Epsilon, Phi Psi, Alpha Zeta, Alpha Tau Alpha, and Iota Lambda Sigma, give recognition to superior work done by Engineering, General Science, Textile, Agricultural, Agricultural Education, and Industrial Education students respectively.

The honor society of Phi Kappa Phi has a chapter at Clemson.

The military activities of the cadet officers of the corps are recognized in membership in the Society of Scabbard and Blade, a national military honor fraternity.

The Blue Key, a national fraternity based upon leadership, has a chapter at Clemson.

Student Clubs. Students majoring in various courses of instruction have organized clubs. Among such clubs are in-

cluded the Agricultural Economics Club, the Dairy Club, the Horticultural Club, the Minaret Club (an architectural organization), the Athanor (a chemical society), and Iota Epsilon (Industrial Education).

Two literary societies, the Calhoun and the Palmetto, furnish a valuable supplement to scholastic work.

Engineering Societies. Outstanding students majoring in engineering courses are selected for membership in the Student Chapter of the American Institute of Electrical Engineers, American Society of Mechanical Engineers, and the American Society of Civil Engineers.

THE YOUNG MEN'S CHRISTIAN ASSOCIATION

The Y. M. C. A. partakes of the nature of a small city Y. M. C. A. While it is recognized as a student association, the tremendous volume of community service undertaken in the building might easily qualify it as a community building. Hundreds of basketball and volley ball games are participated in by students, faculty, campus children, and visitors from neighboring communities. Social functions sponsored by the Y. M. C. A., or with the Y. M. C. A. cooperating, and Open House programs are almost daily occurrences in the club rooms, scout rooms, and cabinet rooms. It is here that many visiting groups are entertained with, and for, students and campus organizations. Evening Watch prayer groups, forum groups, freshman, sophomore, junior, and senior councils all cooperate with, and under, the leadership of the Y. M. C. A. senior cabinet to make possible a real spiritual and mental development in the lives of all the students. Sixty-two faculty members and others visited with students in their evening watch or forum meetings in barracks last year and many student leaders took part in these meetings.

The Y. M. C. A. has supervision of voluntary religious activities of the students and endeavors to contribute to the religious, social, and physical life of the college community.

There are two Vesper services in the Y. M. C. A. auditorium each Sunday. Usually 400 or more attend the afternoon Vesper and often 550 or 600 attend the evening Vesper. Outstanding speakers and many visiting deputation groups are supplemented by local speakers, ministers, and campus leaders. Many educational, news, and travel reels are shown for the students over the weekend.

ATHLETICS

It is the policy of the College to sanction and encourage athletics so long as participation does not interfere with studies and other duties. Football, baseball, basketball, and track are the most popular sports. The College is a member of the Southern Conference and of the South Carolina Intercollegiate Athletic Association.

Intercollegiate Athletics. For the regulation of intercollegiate athletics, the faculty has adopted the following rules:

1. At the end of each grading period, the faculty athletic committee will canvass the records of athletes; and if any are found to be so deficient as to endanger their scholastic standing, they will be withdrawn from the squad.

2. In order to participate in intercollegiate contests, each athletic team may be allowed a maximum absence of ten days during the session (Saturday afternoon, Sunday and holidays not to be included). No one contestant or representative shall be allowed to leave the campus for more than twenty days during the session, except at the discretion of the faculty athletic committee.

3. No member of an athletic team shall be eligible for a managerial position in any other branch of sport.

4. No team shall be allowed to leave the college grounds to participate in any match game unless accompanied by an authorized coach or other member of the faculty, who shall be responsible to the college for the conduct of the players while away.

5. No student shall be eligible to participate in an intercollegiate contest who is away from the College without proper authority or without having complied with all the rules or orders issued by the President regarding such matters.

6. It shall be the duty of the faculty athletic committee to see that the foregoing rules and regulations are strictly enforced.

MEDALS AND HONORS

Trustees' Medal. The Board of Trustees has provided for a gold medal to be awarded annually at Commencement to the best speaker among the representatives of the literary societies. In 1940 the medal was awarded to William Barnett Wade, Clinton, South Carolina.

Norris Medal. The following is from the will of Hon. D. K. Norris, a life trustee of Clemson, who died in 1905:

"I give $500 face value, Norris Cotton Mill stock . . . . on condition the dividend thereon shall be applied annually to the purchase of a gold medal, to be known as the 'Norris Medal,' to be awarded to the student of Clemson meriting the same at graduation, under such rules and conditions as may be prescribed by the said Board of Trustees, and which medal shall have engraved on it 'Honor habet onus' (Honor brings responsibility)."

In 1940 the medal was awarded to Preston Tobe Garrett, Fountain Inn, South Carolina.

R. W. Simpson Medal. A medal designated as the " R. W. Simpson Medal" is awarded annually to the best drilled cadet in the freshman, sophomore, or junior class. In 1940 the medal was awarded to David Lee McFalls, Orangeburg, South Carolina.

Arnold R. Boyd English Honor Key. Arnold R. Boyd, '14, now a lawyer in New York, donates this Honor Key annually to the student in the graduating class who makes the highest average in English during his college course. In 1940 this key was awarded to George McKamie McMillan, Chattanooga, Tennessee.

Architect's Medal. The South Carolina Chapter of the American Institute of Architects each year awards a medal to the outstanding junior or senior in Architecture. In 1940 the medal was awarded to Tebee Padgett Hawkins, Lincolnton, North Carolina.

Agricultural Certificates of Merit. Beginning with the session of 1914-1915 certificates of merit have at times been awarded to two farmers in South Carolina who have rendered distinguished service in the agricultural development of the State. In 1940 these certificates were awarded to Mrs. Horace Lee Tilghman of Marion, Mr. Lee M. Wiggins, and to the town of Summerville. The award to the town of Summerville was accepted by Mayor Grange S. Cuthbert.

National Association of Cotton Manufacturers Medal. For several years this medal has been awarded to the outstanding graduate in Textile Engineering. In 1940 the medal was won by John Gaines Hammond, Greenwood, South Carolina.

Textile Colorist Prize. This award for the best work done in Textile Chemistry and Dyeing by a member of the graduating class was won in 1940 by Richard Andrew Martinell, Enoree, South Carolina.

Award by the Faculty of the School of Agriculture. This award to the agricultural graduate having the highest scholastic record for four years was won in 1940 by Drake Harden Rogers, Blenheim, South Carolina.

Anderson Fellowship. This fellowship, which provides the sum of $400.00 for pursuing graduate study, was awarded in 1940 to Drake Harden Rogers, Blenheim, South Carolina.

Clemson Foundation Award. This award of $50.00 by the Clemson Foundation to an undergraduate who is attending Clemson largely through his own efforts and whose scholastic record is good was won in 1940 by James Allen Mixon, Heath Springs, South Carolina.

PART IV—ORGANIZATION AND GOVERNMENT

ADMINISTRATIVE ORGANIZATION

Board of Trustees. The government of the College is vested in a Board of thirteen members, six of whom are elected by the Legislature, and seven life and self-perpetuating under the Clemson will. The function of this Board is legislative and not executive. The Board determines the general policy of the College, makes the laws for its government, and directs the expenditure of its funds.

The President is the chief executive and administrative officer of the Board of Trustees. He is the the head of the College and is responsible for its satisfactory working and success.

The College is divided into schools of Agriculture, Chemistry, Engineering, General Science, Textiles, and Vocational Education. A dean is at the head of each school and is responsible to the President for its conduct and success. The schools are comprised of departments. Each department is in charge of a professor who acts as its head. The President conducts all official business with each department through its dean.

The Faculty consists of all officers of instruction in the College. The voting members are the deans, professors, associate professors, and assistant professors.

The faculty meets once a month, or whenever called by the President, and is an advisory body to the President, on the instructional work of the College and such other business as he may bring before it.

The deans and directors of the various schools and departments meet weekly or when called by the President for consideration of matters affecting the welfare of the College. Departmental faculty meetings are held periodically.

Faculty Committees. In order to aid him in his executive duties and to carry on the instructional work of the College, the President appoints committees from the faculty. To these are assigned certain specified lines of work and the committees are clothed with full authority.

The Discipline Committee. The Discipline Committe is composed of the six deans of the schools and two full professors elected annually by the Board of Trustees. This committee constitutes the court of the College and tries cadets charged with serious offenses under the regulations. The President is the reviewing authority of the Discipline Committee, and may at his discretion set aside or modify the sentences imposed. A parent, or a cadet over age, has the right to appeal from the sentence of the Discipline Committee to the Board of Trustees, provided the appeal is lodged with the President of the College within thirty days. This appeal must be forwarded to the President of the Board of Trustees, who, if he deems the appeal meritorious, shall present it at the next regular or called meeting of the Board.

All trials by the Discipline Committee are open to the public and all testimony is taken under oath and recorded stenographically as is in a civil court. A student on trial may have some member of the faculty to assist him in his defense if he so desires.

MILITARY ORGANIZATION

The President. The President of the College shall have general command and government of the institution, watching over its administration, discipline, and instruction. He shall have authority to make rules from time to time, governing the granting of permits and furloughs to cadets; to inspect anything in a cadet's room or personal baggage; to suspend or modify these regulations, or to publish special regulations when he considers it necessary, which shall have the authority of the Board of Trustees until they shall act on the same. He shall prescribe the hours of study, drill, and recreation.

Commandant. The Commandant of Cadets, under the President, has supervision of the discipline of the Corps of Cadets. He shall prescribe the order in which the furniture, bedding, books, clothing, equipment, etc., shall be arranged throughout the barracks and shall make a thorough inspection of the rooms, furniture, arms, equipment and uniforms of the cadets at least once each week. He shall have the right to inspect anything in a cadet's room or personal baggage. He shall perform such other duties as are prescribed in the regulations. He shall have the rank of Colonel.

Assistant Commandants. The Assistant Commandants shall perform such duties as may be prescribed for them by the President or Commandant.

Military Instruction. All students, excepting such students as are excused by the President, must take a minimum of three hours military instruction per week. All who pass the required physical examination must take the Basic Course prescribed by the War Department for the R. O. T. C. during their freshman and sophomore years.

Members of the junior and senior classes are selected by the Professor of Military Science and Tactics, subject to the approval of the President, to take the Advanced Course prescribed for the R. O. T. C., receiving certain financial benefits allowed by the Federal Government.

Cadet Officers and Non-commissioned Officers. The cadet officers and non-commissioned officers are appointed by the Professor of Military Science and Tactics, subject to the approval of the President. When practicable they shall be appointed from members of the R. O. T. C. who have been most studious and soldier-like in the performance of their duties and most exemplary in their conduct. No cadet may decline any office to which he may be appointed.

As a rule the officers shall be appointed from the senior class, the non-commissioned officers, except corporals, from the junior class, and the corporals from the sophomore class.

Study Hours. Study hours are those parts of the day which are designated for study and shall be prescribed in orders. All hours at which a student has no classes or other duties may be used as study hours and students are expected to use vacant hours during the day as well as the study period after supper for study.

Class Attendance. Punctuality in the attendance of classes and other prescribed duties is required at Clemson College. However, to allow for personal emergencies, a limited number of class absences is allowed, under the provisions of the class attendance regulations.

Furloughs. Every cadet is responsible for his class absences whether he is on a furlough or at the college. Restrictions regarding class absences are explained in the class attendance regulations. Any cadet who has been granted a furlough and who stays over the time stipulated, unless for sickness or other reason acceptable to the Commandant, will be administered a punishment not to exceed one month's arrest and twenty demerits. In case a cadet is prevented by sickness from returning at the stipulated time, he must submit a certificate from his attending physician. However, no such certificate will be accepted unless the President or the Commandant has been notified in advance of the expiration of the furlough.

Cadets returning late on furlough are placed in room arrest pending an investigation of the reason of the late return.

All communications from parents requesting furloughs for their sons must be addressed or sent directly to "The Commandant," and must set forth fully the reason for the request. No furlough will be granted unless the reasons given are considered satisfactory and sufficient justification for any loss of time from college duties; every student is held responsible for his class absences in accordance with the provisions of the class attendance regulations. Telegrams which do not explain fully will not be

accepted as complying with the rules. In any case in which business is given as a reason, the nature of the business must be explained fully.

A parent has the right to demand a discharge from college at any time and for any reason, but the college authorities reserve the right to grant or refuse to grant furloughs.

Week-End Leaves. Week-end leaves will be granted under conditions prescribed by the President.

Demerits. Any regular cadet who may receive within any one semester more than 90 demerits during his freshman year, or more than 70 demerits during his sophomore year, or more than 60 demerits during his junior year, or more than 50 demerits during his senior year; or any day cadet who may receive within any one semester more than 70 demerits during his freshman year, or more than 60 demerits during his sophomore year, or more than 50 demerits during his junior year, or more than 35 demerits during his senior year shall be required, by the President, to withdraw immediately from College.

Discharge. No cadet unless twenty-one years of age and paying his own way at college shall be honorably discharged except on the written application of his parents or guardian addressed to the President, or for reasons satisfactory to the President.

SCHOLASTIC REGULATIONS

1. The semester hour shall be the basis of all credits. One recitation hour or three laboratory or shop hours a week if self-contained, or two if considerable work is required out of the class period, shall constitute a semester hour.

2. The standing of a student in his work at the end of a semester shall be based on daily class work, regularity of attendance, tests or other work, and the final examinations.

3. Written examinations shall be required in all subjects at the end of each semester, except in certain laboratory or practical courses where not deemed necessary by the department faculty. A student who has been absent from more than one-fourth of the total number of class periods in any subject for a semester is debarred from the final examination.

4. A semester grade once reported to the Registrar shall be the final grade for the period covered.

5. No semester grade shall be given out or posted until the last day of the examination period. Grades will then be posted by instructors as promptly as possible.

6. When an instructor completes a subject he may hold an examination on it before beginning the next subject, provided such examination does not conflict with the regularly scheduled work.

7. *Reports and Grades*—Semester reports are mailed to parents after the end of each semester (usually within two or three weeks). Mid-semester reports do not form a part of the permanent record in the Registrar's office, but are sent to parents for their information.

The grading system shall be as follows:

A—Excellent. Indicates that the student is doing work of a very high character. The highest grade given.

B—Good. Indicates work that is satisfactory, though not of the highest order.

C—Fair. Indicates work of average or medium character.

D—Pass. Indicates work below average and unsatisfactory. The lowest passing grade. For graduation in 1942 or 1943, a student must complete his course with a grade above *D* on at least fifty per cent of the total credit hours required. For graduation in 1944 and 1945, a student must complete his course with such grades as to give him twice as many grade points as the number of credit hours required.

E—Conditioned. Indicates a failure to satisfy the requirements as to daily recitations, tests or other work, as well as to the final examination, which condition in the opinion of the instructor may be made up by reexamination at some fixed time.

F—Failed. Indicates that a student knows so little of the subject that it must be repeated in order that credit may be received.

I—Incomplete Work. Indicates that a relatively small part of the semester's work remains undone. A grade *I* is not to be given a student who has made a grade F on his daily work.

"I-Abs. Ex." Indicates absence from examination on account of sickness or other satisfactory reason.

8. *Grade Points.* Nine grade points are assigned for each credit hour on which the student receives the grade of *A;* six grade points for each credit hour of grade *B;* and three for each credit hour of grade *C.* No grade points are assigned for grades *D, E,* or *F.* In calculating a student's grade-point ratio, the total number of grade points accumulated by the student is divided by the total number of credit hours taken by the student during the semester, session, or other period for which the ratio is calculated.

9. *Absences from Class. Removal of Grade I .*

Instructors keep a daily record of class attendance.

Students should not request instructors to excuse them from classes or to change class periods or examinations. Instructors have no authority to grant such requests.

All class work missed on account of absences for good and sufficient reasons shall be made up to the satisfaction of the instructor within thirty days after the student returns to classes.

All incomplete grades (*I's*) for a semester not removed within thirty days after the beginning of the next semester shall become *F's* unless an extension of time is approved by the instructor concerned and the Scholastic Committee.

A student who, for reasons satisfactory to the faculty, is absent from any of the first semester examinations will be graded *I-Abs. Exam.* and will be allowed to make up these examinations during the second semester at the period scheduled for this work. A student who is absent for satisfactory reasons from any of the second semester examinations shall stand them during the make-up period in September. A student who is absent from an examination without excuse is graded F.

10. *Special Examinations.* Any request for a special examination must be approved by (1) the instructor concerned, (2) the head of the department concerned, (3) the dean of the school, and (4) the registrar. When the request is approved by all those concerned, a special examination will be given on payment of a $2.00 fee.

11. *Removal of Conditions.* Only one opportunity shall be given a student to remove a condition (*E*) by a reexamination. A student who fails to pass such a reexamination shall be required to repeat the subject hour for hour in class. Not more than twelve credit hours of conditions for a session shall be removed by reexamination. A student shall not receive a grade higher than D when a deficiency is removed by reexamination.

Reexaminations shall be held as scheduled by the schedule committee. All conditions (*E's*) not removed during the time set aside for reexaminations shall become failures. Seniors may remove conditions during the week preceding Commencement.

12. *Removal of Failures.* A student who has failed (made a grade *F*) in a subject cannot receive credit for that subject until it has been repeated hour for hour in class, except that in the case of correlated laboratory work, the number of hours to be taken shall be determined by the instructor. Where separate

grades for class and laboratory work are given, that part of the subject shall be repeated in which the failure occurs.

13. *Withdrawals on Account of Unsatisfactory Work.* A student whose record is generally unsatisfactory may be required to withdraw from college at any time.

A student who at the end of the first session of his attendance does not make a grade of *D* or above on at least eighteen credit hours shall not be permitted to return the following session.

A student who at the end of his second session of attendance does not have to his credit at least forty-two semester hours and forty-two grade points shall not be permitted to return for the following session.

14. *Promotion and Classification.* Promotion is by subjects, but a student is classified according to the amount of college work completed. The term freshmen is used to apply to new students with the exception of those who have completed as much as a full year of college work elsewhere. Old students who have not passed as much as twenty-four semester credit hours are also designated as freshmen. To be a sophomore a student must have to his credit at least twenty-four semester hours. To be a junior a student must have completed a total number of semester hours within fourteen credits of the requirements of the first two years of his course, and he must have to his credit at least twice as many grade points as this minimum number of credit hours. A student must have completed a total number of semester hours within forty-seven credits of the requirements for graduation in his course, and must have to his credit at least twice as many grade points as this minimum number of credit hours, before he may be enrolled as a senior or hold any office or appointment reserved by the faculty for seniors. A student's classification at the beginning of the session will remain his classification throughout the session. Every student is responsible for knowing the requirements of his course and his status in regard to meeting these requirements.

15. *Amount of Class Work Permitted and Required.* The normal schedule for a student includes only as many credit hours as are required for the class and course in which he is registered. Students should schedule this amount of work unless their credits are restricted as a result of a poor scholastic record. Students are advised not to exceed the normal schedule except upon approval by the class adviser.

The maximum number of credit hours which a student may schedule during either semester of a session is governed by his grade-point ratio on all scholastic work taken at the college prior to the opening of that session. (The entering freshman is restricted to the requirements of his course.) The following table indicates the cumulative grade-point ratio required for a student to be permitted to schedule a specified maximum number of credit hours. The maximum allowed in either semester is listed opposite the grade-point ratio which the student must have on all work taken at the college prior to the opening of the session concerned:

Grade-Point Ratio Required on All Previous Scholastic Work at Clemson	Maximum Semester Credit Hours Which May Be Scheduled in Either Semester of the Session Concerned
0.00 to 0.99	18
1.00 to 1.99	19
2.00 to 2.99	20
3.00 to 3.99	21
4.00 to 4.99	22
5.00 to 5.99	23
6.00 to 6.99	24
7.00 to 7.99	25
8.00 or above	26

If any student schedules excessive credits amounting to one-third of a semester hour or a greater amount, he will be automatically dropped from a sufficient number of subjects to reduce his total credits within the limits. If for any reason a student's excessive registration continues throughout the semester, his credit

on one or more subjects passed will be cancelled at the end of the semester.

16. *Dropping Class Work.* Upon the recommendation of the instructor and the director concerned to the President, a student's standing will be investigated and he may be required to drop a subject because of neglect, or lack of application or preparation. No student will be dropped under this rule without approval by the President.

A subject dropped after the middle of the semester is recorded as a subject failed unless the student shall have a daily average of *C* or above in that subject; in which case it will be recorded as "subject dropped."

17. *Time of Scheduling Work.* All students shall register for classes during the class registration period. A fee of two dollars is charged for registering late for class work.

18. *Deficiences in Year Courses.* A student who receives a grade *F* on a first-semester subject that is prerequisite for a second-semester subject shall not schedule such second-semester subject without permission of the scholastic committee and the dean of the school concerned.

19. *How to raise a Grade E.* A grade *E* may be removed as prescribed in Section 11. However, if a student makes a grade *E* in a subject which continues beyond the first semester and to the end of the second semester, the instructor may at the end of the session recommend that the grade be raised to a *D,* provided the grade made on the work of the second semester is *A* or *B.* In such a case the recommendation of the instructor shall be made a special report, must be approved by the dean of the school, and must accompany the grades of the second semester.

20. *Promotion to the Junior and Senior Classes.* A student shall not be permitted to enroll in the senior class until all the work of the freshman and sophomore classes has been com-

pleted. A student shall not be admitted to the junior and senior classes who has not met the requirements stated in Rule 14.

21. *Requirements for Graduation.* For graduation in 1942 or 1943, a student must complete his course with a grade above *D* on at least fifty per cent of the total credit hours required. For graduation in 1944 and 1945, a student must complete his course with such grades as to give him twice as many grade points as the number of credit hours required. All work must be completed before 5 P. M. on the Wednesday preceding Commencement. Residence of at least one regular session shall be required for graduation.

22. *Seniors Failing to Graduate.* A senior who fails to graduate because of one *F* on any subject shall have an opportunity of removing it by examination during the make-up period in September provided he can furnish evidence of having done satisfactory study. Failing to do this he shall repeat the subject.

23. *Change in Course.* Aimless shifting is discouraged, but for good reasons a change in course may be made at the end of any semester. The student must meet the full requirements of the course to which he changes.

24. All requests from the students to the faculty must be made in writing.

PART V—DEGREES AND CURRICULA

REQUIREMENTS FOR DEGREES

The degree of Bachelor of Science is awarded to those students who satisfactorily complete one of the four-year curricula offered under the Schools of Agriculture, Chemistry, General Science, Textiles, Vocational Education, and to those students who complete either the course in Architecture or the course in Chemistry-Engineering under the School of Engineering. The degrees of Bachelor of Civil Engineering, Bachelor of Electrical Engineering, and Bachelor of Mechanical Engineering are awarded to the graduates of these respective courses.

In addition to the courses prescribed in the various curricula, at least twelve hours of *free electives* are allowed. Other electives are subject to the approval of the dean of the school in which the major course is taken. For rules governing scholastic work, see the scholastic regulations.

All work for a degree must be completed by 5 P. M. on the Wednesday preceding graduation exercises. Residence of at least one regular session is required for graduation. Every candidate for a degree must pay to the Treasurer of the College the cost of his diploma before 5 P. M. on the Wednesday preceding graduation.

If all work toward a degree is not completed within five years after entrance, the student may be required to take additional courses.

PROFESSIONAL DEGREE IN ENGINEERING

The College offers the following professional engineering degrees: Civil Engineer, Electrical Engineer and Mechanical Engineer.

The requirements for these degrees are: (a) a Bachelor's degree from Clemson College in one of these three branches in

engineering, (b) five years of subsequent professional experience, one year of which must have been in responsible charge of engineering or engineering instruction, (c) the preparation of a thesis demonstrating distinct technical ability. (Detailed information regarding professional degrees may be obtained from the Registrar.)

COURSES OF STUDY

Twenty-two undergraduate courses of study are offered in the schools of Agriculture, Chemistry, Engineering, General Science, Textiles, and Vocational Education. The major courses under each department are indicated below:

School of Agriculture
- Agricultural Economics and Rural Sociology
- Agricultural Engineering
- Agronomy
- Animal Husbandry
- Dairy
- Entomology
- Horticulture

School of Chemistry
- Chemistry

School of General Science
- General Science
- Pre-Medical

School of Engineering
- Architecture
- Chemistry—Engineering
- Civil Engineering
- Electrical Engineering
- Mechanical Engineering

School of Textiles
- Textile Chemistry and Dyeing
- Textile Engineering
- Weaving and Designing

School of Vocational Education
- Agricultural Education
- Education
- Industrial Education
- Textile Industrial Education

In addition to the work in these regular courses, the college offers the opportunity for certain work after graduation to properly qualified students from this and other institutions. This work may be of an advanced nature or may be a special program of undergraduate studies. Students interested in work along this line should consult the Registrar or the Head of the Department concerned. Graduate Work is offered in the Sum-

mer in Vocational Education. For information, write the Registrar or the Dean of the School of Vocational Education.

While the college is glad to assist all who ask for help in securing employment, it does not guarantee positions to those who complete any of the courses of study.

In the curricula which follow are given the official title and number of the course, the descriptive title, the number of semester hours credit, and in parentheses the number of hours per week in class and laboratory, respectively.

SCHOOL OF AGRICULTURE

The basic curriculum in agriculture consists of fundamental and comprehensive subject matter in the School of Agriculture supplemented with courses in English, mathematics, and in the natural and social sciences. In addition to the courses required, opportunity is given for a broad selection of courses in the School of Agriculture and other schools of the College, which will prepare students for farming, positions as county agricultural agents, specialists and technicians in many fields of agriculture and allied industries, and other occupations of usefulness in an agricultural community.

The minimum requirements for the degree of Bachelor of Science in Agriculture are as follows:

Required courses in other schools	52 1/3 credits
Required courses in School of Agriculture	50 1/3 credits
Electives (of which 12 are free electives)	39 1/3 credits
Total minimum credits required	142

All students in the School of Agriculture with the exception of those electing agricultural engineering, pursue the same curriculum during the freshman and sophomore years. Certain courses are also required of all agricultural students during the junior and senior years. In the junior year a student must elect a major in agricultural economics, agronomy, animal husbandry,

dairying, entomology, or horticulture. Sufficient courses will be elected to complete the requirements for graduation.

Students of the School of Agriculture are given an opportunity to become familiar with the work of the agricultural experiment station, the extension service, crop pest commission, and fertilizer inspection and analysis. They also have opportunity to work on thesis problems in cooperation with members of the agricultural experiment station staff and in this way gain an insight into the methods employed in scientific research.

AGRICULTURE

Basic Curriculum
Required of all Agricultural Students

(Except those in Agricultural Engineering)

Freshman Year

First Semester			*Second Semester*		
•A. H. 12, Types, Breeds and Market Classes	2⅔	(2,2)	•Agr. 11, Field Crops	3	(3,0)
Bot. 13, Agricultural	2⅔	(2,2)	Bot. 14, Agricultural	3⅓	(2,4)
Gen. Chem. 11, General	3⅔	(3,2)	Gen. Chem. 12, General	3⅔	(3,2)
Drawing 11, Freehand	⅔	(0,2)	Drawing 12, Mechanical	⅔	(0,2)
English 15, Comp. & Lit.	3	(3,0)	English 16, Comp. & Lit.	3	(3,0)
Math. 15, College Algebra	3	(3,0)	Math. 11, Trigonometry	3	(3,0)
M. S. 11, Military Science	1⅔	(1,2)	M. S. 12, Military Science	1⅔	(1,2)
	17⅓			18⅓	

Sophomore Year

Org. Chem. 23, Organic	4	(3,3)	•Ag. Ec. 22, Ag. Econ.	3	(3,0)
•Dairy 21, Dairying	2⅔	(2,2)	Agr. 20, Soils	2⅔	(2,2)
English 21, Lit. and Adv. Comp.	2	(2,0)	•Ag. Engr. 22, Farm Mach.	2⅔	(2,2)
•Geol. 21, Agricultural	3	(3,0)	Org. Chem. 24, Organic	4	(3,3)
M. S. 21, Military Science	1⅔	(1,2)	English 22, Lit. and Adv. Comp.	2	(2,0)
Phys. 15 and 29, Physics	3⅔	(3,2)	•Hort. 22, General	3	(2,3)
Zool. 21, Zoology	2⅔	(2,2)	Phys. 16, Physics	⅔	(0,2)
			M. S. 22, Military Science	1⅔	(1,2)
	19⅔			19⅔	

Junior Year

A. H. 31, Feeds and Feeding	3	(3,0)	Ag. Ec. 32, Farm Org. and Mgt.	2⅔	(2,2)
Bact. 31, General	3⅓	(2,4)	Agr. 32, or Dairy 32, Genetics	2⅔	(2,2)
Ent. 31, Introd. and Appl. Ent.	2⅔	(2,2)	M. S. 32, Military Science	⅔	(0,2)
M. S. 31, Military Science	⅔	(0,2)	P. H. 32, Farm Poultry	2⅔	(2,2)
Major and Electives	7⅓		Major and Electives	8⅓	
	17			17	

•Offered both semesters.

Senior Year

Ag. Ec. 45, Rural Soc.	3	(3,0)	Gov. 32, Government	3	(3,0)
†Agr. 31, Fertilizers and Manures	2	(2,0)	M. S. 42, Military Science	⅔	(0,2)
M. S. 41, Military Science	⅔	(0,2)	Major and Electives	12⅓	
Major and Electives	11⅓			16	
	17				

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY MAJOR

Junior Year

First Semester			*Second Semester*		
Required in Basic Curriculum	9⅔		Required in Basic Curriculum	8⅔	
Ag. Ec. 31, Stat. Methods	3	(3,0)	Ag. Ec. 34, Public Finance	3	(3,0)
Ag. Ec. 33, Coop. in Ag.	3	(3,0)	Electives	5⅓	
Electives	1⅓			17	
	17				
Suggested Electives:			Suggested Electives:		
Agr. 33, Forage Crops	3	(3,0)	Econ. 24, Economics	2	(2,0)
Econ. 23, Economics	2	(2,0)	Econ. 31, Cont. Ec. Problems	3	(3,0)
Econ. 31, Cont. Ec. Problems	3	(3,0)	Eng. 32, Business Law	2	(2,0)
Eng. 31, Public Speaking	2	(2,0)	French 12 or German 12	3	(3,0)
French 11 or German 11	3	(3,0)	Hist. 32, Hist. of Civilization	3	(3,0)
Hist. 31, Hist. of Civilization	3	(3,0)			

Senior Year

Required in Basic Curriculum	5⅔		Required in Basic Curriculum	3⅔	
Ag. Ec. 41, Principles of Marketing	3	(3,0)	Ag. Ec. 40, Econ. Geography	3	(3,0)
Ag. Ec. 43, Farm Finance and Accounting	3	(3,0)	Ag. Ec. 44, Land Economics	3	(3,0)
Ag. Ec. 51, Seminar	1	(1,0)	Ag. Ec. 46, Farmer Movements	3	(3,0)
Electives	4⅓		Ag. Ec. 52, Seminar	1	(1,0)
	17		Electives	2⅓	
				16	
Suggested Electives:			Suggested Electives:		
French 21, or German 21	3	(3,0)	Econ. 24, Economics	2	(2,0)
Agr. 45, Crop Nutrition	2	(2,0)	Sociol. 31, Sociology	2	(2,0)
Eng. 31, Public Speaking	2	(2,0)	French 22 or German 22	3	(3,0)
Agr. 43, Farm Problems	2	(2,0)	Agr. 42, Soil Fert. and Mgt.	2	(2,0)
			Hort. 52, Com. Pomology	2⅔	(2,2)

AGRONOMY MAJOR

Junior Year

First Semester			*Second Semester*		
Required in Basic Curriculum	9⅔		Required in Basic Curriculum	8⅔	
Agr. 31, Fert. and Manures	2	(2,0)	Bot. 30, Plant Phys.	3⅓	(2,4)
Agr. 33, Forage Crops	3	(3,0)	Electives	5	
English 31, Public Speaking	2	(2,0)		17	
Electives	⅓				
	17				
Suggested Electives:			Suggested Electives:		
Hort. 31, Plant Prop.	2⅔	(2,2)	Ag. Engr. 38, Soil Conservation	2	(1,3)
Psychol. 35, Psychol. for Teachers	3	(2,2)	Psychol. 36, Psychol. for Teachers	3	(2,2)

†Agronomy students take Agronomy 31 in the Junior Year and schedule two hours additional elective in the Senior Year.

Senior Year

Required in Basic Curriculum	3⅔	
Agr. 45, Crop Nutrition	2	(2,0)
Agr. 47, Adv. Crop Lab.	⅔	(0,2)
Agr. 49, Plant Breeding	2⅔	(2,2)
Agr. 51, Seminar	1	(1,0)
Agr. 53, Cotton	2	(2,0)
Agr. 61, Thesis	1	(0,3)
Electives	4	
	17	

Suggested Electives:		
Bot. 41, Field Crop Diseases	2⅔	(2,2)
Geol. 33, Mineralogy	2⅔	(2,2)

Required in Basic Curriculum	3⅔	
Agr. 42, Soil Fert. and Mgt.	2	(2,0)
Agr. 44, Adv. Soil Lab.	⅔	(0,2)
Agr. 52, Seminar	1	(1,0)
Agr. 62, Thesis	1	(0,3)
Bact. 44, Soil Microbiology	3	(2,3)
Electives	4⅔	
	16	

Suggested Electives:		
Ag. Ec. 40, Econ. Geography	3	(3,0)
Ag. Ec. 44, Land Economics	3	(3,0)
Y. M. 28, Cotton Grading	⅔	(0,2)

ANIMAL HUSBANDRY MAJOR

Junior Year

First Semester

Required in Basic Curriculum	9⅔	
A. H. 35, Farm Meats	2	(0,6)
Electives	5⅓	
	17	

Suggested Electives:		
Ag. Ec. 31, Stat. Methods	3	(3,0)
English 31, Pub. Speaking	2	(2,0)
Psychol. 35, Psychology	3	(2,2)
Dairy 31, Judging	1	(0,3)
Agr. 33, Forage Crops	3	(3,0)

Second Semester

Required in Basic Curriculum	8⅔	
A. H. 32, Judging	1	(0,3)
A. H. 34, Pork Production	2⅔	(2,2)
Electives	4⅔	
	17	

Suggested Electives:		
Ag. Engr. 38, Soil Conservation	2	(1,3)
Hort. 32, Prin. Veg. Prod.	2⅔	(2,2)

Senior Year

Required in Basic Curriculum	5⅔	
A. H. 41, Advanced Feeds and Feeding	2	(2,0)
A. H. 43, Beef Production	2⅔	(2,2)
Vet. 41, Anatomy and Phys.	2⅔	(2,2)
Electives	4	
	17	

Suggested Electives:		
A. H. 45, Adv. Judging	1	(0,3)
A. H. 47, Adv. Nutrition	2	(2,0)
P. H. 41, Judging and Breeding	2⅔	(2,2)
Eng. 31, Public Speaking	2	(2,0)
Ag. Ec. 43, Farm Finance	3	(3,0)

Required in Basic Curriculum	3⅔	
A. H. 40, Animal Breeding	2⅔	(2,2)
A. H. 42, Horse and Sheep Production	2⅔	(2,2)
A. H. 44, Adv. Meats	2	(1,3)
A. H. 52, Seminar	2	(2,0)
Electives	3	
	16	

Suggested Electives:		
Ag. Engr. 38, Soil Conservation	2	(1,3)
Agr. 42, Soil Fert. and Mgt.	2	(2,0)
Vet. 42, Diseases	2⅔	(2,2)
P. H. 42, Adv. Poultry	2⅔	(2,2)
Dairy 48, Nutrition	2	(2,0)
Hort. 54, Truck Crops	2⅔	(2,2)
Eng. 49, Ag. Journalism	2	(2,0)

DAIRY MAJOR

Junior Year

First Semester

Required in Basic Curriculum	9⅔	
Dairy 31, Judging	1	(0,3)
Dairy 35, Feeding and Mgt.	2⅔	(2,2)
Electives	3⅔	
	17	

Suggested Electives:

Agr. 33, Forage Crops	3	(3,0)
Ag. Ec. 33, Stat. Methods	3	(3,0)
Eng. 31, Public Speaking	2	(2,0)
Psychol. 35, Psychology	3	(2,2)

Second Semester

Required in Basic Curriculum	8⅔	
Org. Chem. 34, Dairy Chemistry	3	(2,3)
*Dairy 34, Dairy Plant Org. and Management	3	(3,0)
Electives	2⅓	
	17	

Suggested Electives:

Ag. Engr. 38, Soil Conservation	2	(1,3)
A. H. 34, Pork Production	2⅔	(2,2)
*Dairy 36, Market Milk	3	(3,0)
Eng. 32, Business Law	2	(2,0)

Senior Year

Required in Basic Curriculum	5⅔	
Dairy 41, Dairy Manufactures	3	(2,3)
Dairy 43, Breeding	1⅔	(1,2)
Dairy 51, Seminar	1	(1,0)
Vet. 41, Anatomy and Physiology	2⅔	(2,2)
Electives	3	
	17	

Suggested Electives:

Ag. Ec. 43, Farm Finance	3	(3,0)
Agr. 43, Farm Problems	2	(2,0)
Eng. 31, Public Speaking	2	(2,0)
P. H. 41, Poultry Judging and Breeding	2⅔	(2,2)

Required in Basic Curriculum	3⅔	
Bact. 40, Dairy Bact.	3	(2,3)
Dairy 42, Dairy Manufactures	3⅓	(2,4)
Dairy 48, Nutrition	2	(2,0)
Dairy 52, Seminar	1	(1,0)
Electives	3	
	16	

Suggested Electives:

Agr. 42, Soil Fert. and Mgt.	2	(2,0)
*Dairy 34, Dairy Org. & Mgt.	3	(3,0)
Eng. 49, Agric. Journalism	2	(2,0)
P. H. 42, Poultry	2⅔	(2,2)
Hort. 54, Truck Crops	2⅔	(2,2)
Vet. 42, Diseases	2⅔	(2,2)

ENTOMOLOGY MAJOR

Junior Year

First Semester

Required in Basic Curriculum	9⅔	
Zool. 33, Adv. Zoology	2⅔	(2,2)
Electives	4⅔	
	17	

Suggested Electives:

Eng. 31, Public Speaking	2	(2,0)
German 11, German	3	(3,0)
Hist. 31, Hist. of Civ.	3	(3,0)

Second Semester

Required in Basic Curriculum	8⅔	
Ent. 32, Gen. Entomology	3⅓	(2,4)
Electives	5	
	17	

Suggested Electives:

Bot. 30, Plant Phys.	3⅓	(2,4)
German 12, German	3	(3,0)
Eng. 32, Bus Law	2	(2,0)
Zool. 48, Intro. to Game Mgt.	2	(2,0)

*Dairy 34 and 36 are given in alternate years. Dairy 36 will be offered in 1941-1942.

Senior Year

Required in Basic Curriculum	5⅔	
Bot. 43, O. & T. Diseases	2⅔	(2,2)
Ent. 41, Ec. Entomology	2⅔	(2,2)
Ent. 45, Ins. Morphology	2⅔	(2,2)
Ent. 51, Seminar	1	(1,0)
Ent. 59, Introd. to Research	1⅔	(1,2)
Electives	⅔	
	17	
Suggested Electives:		
Ag. Ec. 31, Stat. Methods	3	(3,0)
Ent. 47, Parasitology	2	(2,0)
Psych. 35, Psychology for Teachers	3	(2,2)

Required in Basic Curriculum	3⅔	
Ent. 42, Econ. Ent.	2⅔	(2,2)
Ent. 44, Beekeeping	2⅔	(2,2)
Ent. 46, Systematic Ent.	1⅓	(1,4)
Ent. 52, Seminar	1	(1,0)
Electives	3⅔	
	16	
Suggested Electives:		
Eng. 49, Agri. Journalism	2	(2,0)
Geol. 42, Meteorology	2	(2,0)
Psychol. 36, Psychology for Teachers	3	(2,2)
Soc. 31, Sociology	2	(2,0)
Zool. 34, Adv. Zool.	2⅔	(2,2)

HORTICULTURE MAJOR

Junior Year

First Semester

Required in Basic Curriculum	9⅔	
Hort. 31, Plant Propagation	2⅔	(2,2)
Hort. 33, the Prod. Hort. Crops	2⅔	(2,2)
Electives	2	
	17	
Suggested Electives:		
Ag. Ec. 31, Stat. Methods	3	(3,0)
Eng. 31, Public Speaking	2	(2,0)
Hist. 31, Hist. of Civilization	3	(3,0)

Second Semester

Required in Basic Curriculum	8⅔	
Botany 30, Plant Phys.	3⅓	(2,4)
Hort. 32, Landsc. Gardening	2⅔	(2,2)
Electives	2⅓	
	17	
Suggested Electives:		
Ag Ec. 34, Public Finance	3	(3,0)
Eng. 32, Business Law	2	(2,0)
Hist. 32, Hist. of Civilization	3	(3,0)

Senior Year

Required in Basic Curriculum	5⅔	
Hort. 41 Syst. Pomology	2⅔	(2,2)
Hort. 43, Breeding of Hort. Crops or Hort. 47, Nut Culture and Sprays	2⅔	(2,2)
Hort. 61, Seminar	1	(1,0)
Electives	5	
	17	
Suggested Electives:		
Ag. Ec. 41, Prin. of Mktg.	3	(3,0)
Bot. 43, O. and T. Crop Diseases	2⅔	(2,2)
Hort. 45, Landsc. Design	2	(1,3)

Required in Basic Curriculum	3⅔	
Hort. 52, Com. Pomology	2⅔	(2,2)
Hort. 54, Truck Crops	2⅔	(2,2)
Hort. 62, Seminar	1	(1,0)
Electives	6	
	16	
Suggested Electives:		
Ag Ec. 40, Economic Geog.	3	(3,0)
Hort. 46, Adv. Landsc. Design	2⅔	(2,2)
Hort. 56, Landsc. Design	2	(1,3)
Geol. 42, Meteorology	2	(2,0)
Agr. 42, Soil Fert. and Mgt.	2	(2,0)
Ent. 42, Ec. Entomology	2⅔	(2,2)
Ag. Engr. 38, Soil Conservation	2	(1,3)

AGRICULTURAL ENGINEERING

This course is provided for the training of students in the principles of engineering as applied to agriculture. Due to the rapidly increasing demand for the services and advice of men trained in both agricultural and engineering technique, this

course fills a necessary place in adequately preparing men to meet these demands.

The curriculum is formulated requiring sufficient courses in the liberal arts, the foundation subjects of engineering and agriculture, and the specific agricultural engineering subjects, such as Farm Mechanics, Surveying and Drainage, Motors and Power Machinery, etc., all of which will equip the engineer for any phase of this profession.

AGRICULTURAL ENGINEERING

Freshman Year

First Semester		*Second Semester*	
Bot. 13, Agricultural ---------2⅔	(2,2)	Agr. 11, Field Crops ---------3	(3,0)
Gen. Chem. 11, General ------3⅔	(3,2)	Gen. Chem. 12, General ------3⅔	(3,2)
Drawing 13, Engineering ----1⅓	(0,4)	Drawing 14, Engr. Drawing--1⅓	(0,4)
English 15, Comp. & Lit. ----3	(3,0)	Eng. 16, Comp. & Lit. ------3	(3,0)
Math. 11, Trigonometry ------3	(3,0)	Math. 12, Analytics ---------3	(3,0)
Math. 13, College Algebra----2	(2,0)	Math. 14, College Algebra----2	(2,0)
M. E. 17 or M. E. 12 --------2	(0,6)	M. E. 12 or M. E. 17 ---------2	(0,6)
M. S. 11, Military Science----1⅔	(1,2)	M. S. 12, Military Science----1⅔	(1,2)
19⅓		19⅔	

Sophomore Year

Ag. Engr. 21, Agr. Mechanics 3	(2,3)	Ag. Engr. 22, Farm Mach. 2⅔	(2,2)
A. H. 12, Types, Breeds and Market Classes ----------2⅔	(2,2)	Draw. 26, Elem. Des. & Kin.--⅔	(0,2)
Drawing 25, Mechanical ------⅔	(0,2)	Eng. 22, Lit. & Adv. Comp. 2	(2,0)
Eng. 21, Lit. & Adv. Comp.--2	(2,0)	Math. 22, Int. Calculus ------5	(5,0)
Math. 21, Diff. Calculus ------5	(5,0)	M. S. 22, Military Science----1⅔	(1,2)
M. S. 21, Military Science----1⅔	(1,2)	Physics 22, 24, General------5	(4,3)
Physics 21, 23, General ------5	(4,3)	17	
20			

Junior Year

Ag. Engr. 33, Farm Blgs. --3	(2,3)	Ag. Ec. 32, Farm Mgt. ------2⅔	(2,2)
Ag. Engr. 35, Motors & Pwr. Mach. ----------3	(2,3)	Ag. Engr. 34, Farm Bldgs.----3	(2,3)
C. E. 31, Mechanics ---------3	(3,0)	C. E. 23, Surveying ------1	(1,0)
Dairy 21, Introduction ------2⅔	(2,2)	C. E. 23a, Survey, Field and Office Work ----------⅔	(0,2)
E. E. 35, Elec. Mach. -------2	(2,0)	C. E. 32, Strength of Mat. --3	(3,0)
E. E. 35a, Elec. Lab. ------⅔	(0,2)	Hort. 22, General ----------3	(2,3)
M. S. 31, Military Science----⅔	(0,2)	M. S. 32, Military Science ---⅔	(0,2)
Electives ----------1⅓		Electives ----------2	
16⅔		16	
Suggested Electives:		Suggested Electives:	
Agr. 33, Forage Crops ------3	(3,0)	C. E. 34, Graphic Statics ----1⅔	(1,2)
Drawing 31, Machine Design--1	(0,3)	Drawing 28, Struct. Draw.---⅔	(0,2)
M. E. 21, Metallurgy --------2	(2,0)	Drawing 32, Machine Design-1	(0,3)
M. E. 22, Mat. of Engr. ------2	(2,0)		

Senior Year

Ag. Engr. 41, Rural Elec.	3	(2,3)	Ag. Engr. 44, Surveying & Drainage	3	(2,3)
Ag. Engr. 51, Thesis	⅔	(0,2)	Ag. Engr. 48, Adv. Farm Mach.	2	(1,3)
English 31, Public Speaking	2	(2,0)	Ag. Engr. 52, Thesis	⅔	(0,2)
Geology 21, Agricultural	3	(3,0)	Agr. 20, Soils	2⅔	(2,2)
M. E. 23, Machine Shop	1	(0,3)	M. E. 24, Machine Shop	1	(0,3)
M. E. 42, Hydraulics	3	(3,0)	M. S. 42, Military Science	⅔	(0,2)
M. S. 41, Military Science	⅔	(0,2)	Electives	5	
Electives	3			15	
	16⅓				

Suggested Electives:			Suggested Electives:		
Agr. 43, Farm Problems	2	(2,0)	Bact. 42, Sanitary Bact.	3	(2,3)
			Hort. 52, Com. Pom.	2⅔	(2,2)

SCHOOL OF CHEMISTRY

This course is intended to prepare the student to engage in manufacturing operations involving a knowledge of chemistry, for employment as chemist in commercial, fertilizer inspection, or food or feeding-stuff inspection laboratories, and for experiment station work or U. S. Government service. A student who has satisfactorily completed this course will be well equipped in subject matter to teach elementary chemistry, or to pursue advanced work in chemistry.

Beginning with the junior year, sufficient electives are allowed to enable the student to fit himself for one of the fields of work listed above by pursuing the subject in the direction of chemical engineering, organic, physical, analytical or sanitary chemistry. The advances in all branches of chemistry have made specialization necessary, whether the student expects to enter any of the various lines of work open to a graduate of a thorough course in chemistry, or to pursue graduate work. For the latter group, two years of a modern language should be included in the electives chosen since this is a usual prerequisite for graduate work at most universities. Owing to the demand for biochemistry, any students who are interested in such a course may pursue the Chemistry Curriculum and elect biological subjects during the junior and senior years.

CHEMISTRY

Freshman Year

First Semester			*Second Semester*		
Gen. Chem. 13, General	4⅓	(3,4)	Gen. Chem. 14, General	4⅓	(3,4)
English 15, Comp. and Lit.	3	(3,0)	English 16, Comp. and Lit.	3	(3,0)
*Modern Language	3	(3,0)	*Modern Language	3	(3,0)
Math. 11, Trigonometry	3	(3,0)	Math. 12, Analytics	3	(3,0)
Math. 13, College Algebra	2	(2,0)	Math 14, College Algebra	2	(2,0)
M. S. 11, Military Science	1⅔	(1,2)	M. S. 12, Military Science	1⅔	(1,2)
Physics 11, 15, General	3⅔	(3,2)	Physics 12, 16, General	3⅔	(3,2)
	20⅔			20⅔	

Sophomore Year

Anal. Chem. 21, Qualitative	4	(2,6)	Anal. Chem. 22, Quantitive	4	(2,6)
Org. Chem. 21, Organic	5	(3,6)	Org. Chem. 22, Organic	5	(3,6)
Drawing 13, Engr. Drawing	1⅓	(0,4)	Drawing 14, Engr. Drawing	1⅓	(0,4)
Eng. 21, Lit. and Adv. Comp.	2	(2,0)	Eng. 22, Lit. and Adv. Comp.	2	(2,0)
Math. 21, Dif. Calculus	5	(5,0)	Math. 22, Int. Calculus	5	(5,0)
M. S. 21, Military Science	1⅔	(1,2)	M. S. 22, Military Science	1⅔	(1,2)
	19			19	

Junior Year

Anal. Chem. 31, Quantitative	2	(1,3)	Phys. Chem. 32, Physical	3	(3,0)
Org. Chem. 31, Adv. Organic	3	(2,3)	Phys. Chem. 34, Laboratory	2	(0,4)
Phys. Chem. 31, Physical	3	(3,0)	English 32, Business Law	2	(2,0)
Phys. Chem. 33, Laboratory	2	(0,4)	Geology 34, Mineralogy	2⅔	(2,2)
Econ. 23, Econ.	2	(2,0)	M. S. 32, Military Science	⅔	(0,2)
English 31, Pub. Speaking	2	(2,0)	Sociol. 31, Sociology	2	(2,0)
Geology 33, Mineralogy	2⅔	(2,2)	Electives	4	
M. S. 31, Military Science	⅔	(0,2)			
	17⅓			16⅓	

Senior Year

Anal. Chem. 41, Tech. Anal.	3	(1,6)	Anal. Chem. 42, Stoich.	2	(2,0)
Gen. Chem. 41, Inorg. Chem.	2	(2,0)	Gen. Chem. 42, Inorg. Chem.	2	(2,0)
Gen. Chem. 45, History	2	(2,0)	Ind. Chem. 50, Thesis	3	(0,9)
Phys. Chem. 41, Colloids	2	(2,0)	Phys. Chem. 42, Colloids	2	(2,0)
M. S. 41, Military Science	⅔	(0,2)	M. S. 42, Military Science	⅔	(0,2)
Electives	5⅓		Electives	5⅓	
	15			15	

*History 14 and Government 12, 4 hour option—in place of Modern Language.

SCHOOL OF ENGINEERING

The courses in the School of Engineering are Architecture, Chemistry-Engineering, Civil Engineering, Electrical Engineering and Mechanical Engineering. For most students it is recommended that they take, either as part of the free electives or as an addition, some courses in the social sciences.

If a student in Electrical or Mechanical Engineering does outstanding work in his freshman year, he may arrange with the dean of the School of Engineering to take both Electrical and Mechanical Engineering. This is particularly true of the non-R. O. T. C. student. These two courses may be taken in five years, allowing considerable elective work to be taken in General Science, Textile, and possibly some courses in Civil Engineering.

A student in Mechanical Engineering or Electrical Engineering if non-R. O. T. C. is permitted to elect considerable work in the Textile School if he plans his junior and senior years in advance. The R. O. T. C. student may arrange for a half year or one year additional, in which case he may take considerable Textile work provided he decides this by the beginning of the junior year.

ARCHITECTURE

The information given below applies to the four-year course in Architecture as now given. In order to meet the modern trend the College is offering a five-year course in Architecture leading to the degree of Bachelor in Architecture. In this course the technical work of the lower classes is extended and elaborated, the fifth year design comprising a thesis in which the student selects his subject and writes the program to meet the approval of the faculty of Architecture. Work in Domestic Architecture, Specification Writing, Estimating, Chemistry, Surveying, Advanced History, and allied subjects are included. A copy of the curriculum may be secured upon request.

The course is a well-rounded cultural one, fitting the graduate not only for the practice of architecture, but for a number of allied professions. All work is individual and every effort is made to develop the student's individuality, imagination, and creative ability. Skillful draftsmanship and artistic presentation are insisted upon.

Architecture is one of the fine arts and much time is given to freehand drawing, color work, history of architecture, painting, and sculpture. Architectural design, the principal subject, extends through four years. In this the student is given a written program of requirements for a building or group of buildings and under the criticism of the instructor works out a solution embodying his own ideas. Freehand drawing consists of sketching and rendering from casts, nature and life, in pencil, charcoal, pen and ink, crayons, water color and oils. This extends through four years. History of architecture, historic ornament, and history of art are taught in the sophomore, junior and senior years.

Fundamental courses are given in mathematics, graphic statics, strength of materials, reinforced concrete, building construction, and in working drawings which consist of complete plans and specifications for a building prepared as in the office of a practicing architect.

The work in architecture occupies especially designed quarters on the top floor of Riggs Hall. One feature is a large drafting room equipped with individual drafting tables. This is a marked advantage since all may study their problems in design and have the benefit of mutual help and criticism. Adjoining this room and equipped with controlled lighting, is a studio containing plaster casts and models suitable for the needs in freehand drawing and color work. Class rooms are equipped with lanterns and slides.

A working library adjoining the drafting rooms contains many volumes concerning architecture and allied subjects, photographs, plans and illustrations, lantern slides, drawings, models, and files of the leading architectural magazines, both American and foreign. This is in addition to the main college library. In the structural drafting room is a complete built-in exhibit of building materials and appliances especially arranged for instructional purposes.

Each spring students are expected to take an educational trip to a large city to study examples of architecture and construction.

Six weeks of practical architectural work approved by the architectural faculty are required for graduation (Arch. 28).

ARCHITECTURE

Freshman Year

First Semester			*Second Semester*		
Arch. 11, Elems. of Arch.	1⅔	(0,5)	Arch. 12, Arch. Design	1⅔	(0,5)
Arch. 13, Freehand Drawing	1⅓	(0,4)	Arch. 14, Freehand Drawing	1⅓	(0,4)
Arch. 15, Descrip. Geom.	⅔	(0,2)	Arch. 16, Sh. Shad. & Persp.	⅔	(0,2)
English 15, Comp. and Lit.	3	(3,0)	English 16, Comp. and Lit.	3	(3,0)
*French 11,	3	(3,0)	*French 12	3	(3,0)
*Gen. Chem, 11, General	3⅔	(3,2)	*Gen. Chem. 12, General	3⅔	(3,2)
Math. 11, Trigonometry	3	(3,0)	Math. 12, Analytics	3	(3,0)
Math. 13, College Algebra	2	(2,0)	Math. 14, College Algebra	2	(2,0)
M. S. 11, Military Science	1⅔	(1,2)	M. S. 12, Military Science	1⅔	(1,2)
Physics 11 and 15, General	3⅔	(3,2)	Physics 12 and 16, General	3⅔	(3,2)
	20 or 20⅔			20 or 20⅔	

Sophomore Year

Arch. 21, Arch. Design	4⅔	(0,14)	Arch. 22, Arch. Design	4⅔	(0,14)
Arch. 23, Antique and Color	1	(0,3)	Arch. 24, Antique & Color	1	(0,3)
Arch. 25, Hist. of Arch.	4	(4,0)	Arch. 26, Hist. of Arch.	4	(4,0)
English 21, Lit. and Adv. Comp.	2	(2,0)	English 22, Lit. and Adv. Comp.	2	(2,0)
*French 21	3	(3,0)	*French 22	3	(3,0)
*Hist. 31, Hist. of Civ.	3	(3,0)	*Hist. 32, Hist. of Civ.	3	(3,0)
Math. 23, Dif. Calculus	3	(3,0)	Math. 24, Int. Calculus	3	(3,0)
M. S. 21, Military Science	1⅔	(1,2)	M. S. 22, Military Science	1⅔	(1,2)
	19⅓			19⅓	

Junior Year

Arch. 31, Arch. Design	7⅓	(0,22)	Arch. 32, Arch. Design	7⅓	(0,22)
Arch. 33, Sketching and Paint.	1	(0,3)	Arch. 34, Sketching & Paint.	1	(0,3)
Arch. 35, Bldg. Constr.	3	(3,0)	Arch. 36, Bldg. Constr.	2	(2,0)
Arch. 37, Working Drawings	⅔	(0,2)	Arch. 38, Working Drawings	⅔	(0,2)
Arch. 39, Hist. Ornament	⅔	(0,2)	C. E. 32, Strength of Materials	3	(3,0)
C. E. 31, Mechanics	3	(3,0)	C. E. 34-A, Graphic Statics	1⅔	(1,2)
English 31, Public Speaking	2	(2,0)	English 32, Business Law	2	(2,0)
M. S. 31, Military Science	⅔	(0,2)	M. S. 32, Military Science	⅔	(0,2)
Elective	2		Electives	2	
	20⅓			20⅓	

Senior Year

Arch. 41, Arch. Design	6⅔	(0,20)	Arch. 40, Life Drawing	⅔	(0,2)
Arch. 43, Bldg. Constr.	3	(3,0)	Arch. 40.5, Hist. of Art	2	(2,0)
Arch. 45, Struct. Design	2	(0,6)	Arch. 42, Arch. Design	6⅔	(0,20)
Arch. 47, Mech. Plant	2	(2,0)	Arch. 44, Bldg. Constr.	3	(3,0)
Arch. 49, Life Drawing	⅔	(0,2)	Arch. 46, Struct. Design	2⅔	(0,8)
C. E. 47, Reinforced Conc.	2	(2,0)	Arch. 48, Profess. Prac.	1	(1,0)
Econ. 23, Economics	2	(2,0)	Sociol. 31, Sociology	2	(2,0)
M. S. 41, Military Science	⅔	(0,2)	M. S. 42, Military Science	⅔	(0,2)
Elective	2		Elective	2	
	21			20⅔	

***French 11, 12, 21, and 22 or Chemistry 11, 12 and History 31, 32.**

CHEMISTRY-ENGINEERING

This course combines a well-rounded course in chemistry with fundamental courses in physics, mechanics, and engineering subjects with a view of training men for work in the chemical industries or industries in which both chemistry and engineering knowledge is necessary. The industries are more and more abandoning rule-of-thumb methods and are using men with a knowledge both of chemistry and engineering to design their plans and supervise the operation of various processes. An engineering knowledge is required in solving the engineering problems which arise in connection with the chemical industry or chemical processes. Economical production as well as the turning out of a good product naturally requires an interest in discovering where losses occur; in developing uses for by-products; and recovering and utilizing waste products.

It is hardly possible in a four-year course to cover well this field both in chemistry and in engineering. The course offered leads to a B.S. degree and is not claimed to be a course in Chemical Engineering, though the graduates are qualified for employment as chemists in manufacturing plants or industrial research, as gas plant chemists, and many other fields; and their training makes it possible for them to obtain a Chemical Engineering degree in a minimum of time.

CHEMISTRY-ENGINEERING

Freshman Year

First Semester			*Second Semester*		
Gen. Chem. 13, General	4⅓	(3,4)	Gen. Chem. 14, General	4⅓	(3,4)
Drawing 13, Engr. Drawing	1⅓	(0,4)	Drawing 14, Engr. Drawing	1⅓	(0,4)
English 15, Comp. and Lit.	3	(3,0)	English 16, Comp. and Lit.	3	(3,0)
*History 14, Amer. Ec. Hist.	2	(2,0)	*Gov. 12, Amer. National Govt.	2	(2,0)
Math. 11, Trigonometry	3	(3,0)	Math. 12, Analytics	3	(3,0)
Math. 13, College Algebra	2	(2,0)	Math. 14, College Algebra	2	(2,0)
M. E. 17, or M. E. 12	2	(0,6)	M. E. 12, or M. E. 17, Shop	2	(0,6)
M. S. 11, Military Science	1⅔	(1,2)	M. S. 12, Military Science	1⅔	(1,2)
	19⅓			19⅓	

*Modern Language 3 Hr. Option.

Sophomore Year

Anal. Chem. 21, Qualitative	4	(2,6)	Anal. Chem. 22, Quantitative	4	(2,6)
Drawing 25, Mechanical	⅔	(0,2)	Drawing 26, Elem. Des. and Kin.	⅔	(0,2)
English 21, Lit. and Adv. Comp.	2	(2,0)	English 22, Lit. and Adv. Comp.	2	(2,0)
Math. 21, Dif. Calculus	5	(5,0)	Math. 22, Int. Calcul.	5	(5,0)
M. S. 21, Military Science	1⅓	(1,2)	M. S. 22, Military Science	1⅓	(1,2)
Physics 21 and 23, General	5	(4,3)	Physics 22 and 24, General	5	(4,3)
	18⅓			18⅓	

Junior Year

C E. 31, Mechanics	3	(3,0)	C. E. 32, Strength of Mat.	3	(3,0)
Anal. Chem. 31, Quantitative	2	(1,3)	Org. Chem. 22, Organic	5	(3,6)
Org. Chem. 21, Organic	5	(3,6)	Drawing 32, Mach. Des.	1	(0,3)
Drawing 31, Kin. & Mach. Design	1	(0,3)	English 32, Bus. Law	2	(2,0)
English 31, Public Speaking	2	(2,0)	M. E. 24, Mach. Shop	1	(0,3)
M. E. 23, Mach. Shop	1	(0,3)	M. E. 36, Thermodynamics	3	(3,0)
M E 35, Power Plants	3	(3,0)	M. E. 36a, Mech. Lab.	1	(0,3)
M. S. 31, Military Science	⅔	(0,2)	M. S. 32, Military Science	⅔	(0,2)
Elective	2		Elective	2	
	19⅔			18⅔	

Senior Year

Ind. Chem. 41, Industrial	2	(2,0)	Ind. Chem. 42, Industrial	2	(2,0)
Org. Chem. 31, Adv. Organic	2⅔	(2,2)	Phys. Chem. 32, Physical	3	(3,0)
Phys. Chem. 31, Physical	3	(3,0)	Phys. Chem. 34, Laboratory	2	(0,4)
Phys. Chem. 33, Laboratory	2	(0,4)	E. E. 36, Elec. Mach.	3	(3,0)
Econ. 23, Economics	2	(2,0)	E. E. 36a, Elec. Lab.	⅔	(0,2)
Geol. 33, Mineralogy	2⅔	(2,2)	Geol. 34, Mineralogy	2⅔	(2,2)
M. S. 41, Military Science	⅔	(0,2)	M. S. 42, Military Science	⅔	(0,2)
Elective	4		Elective	4	
	19			18	

CIVIL ENGINEERING

This course is intended to prepare young men for entrance upon professional practice in civil engineering, and also to meet the needs of those who, having been engaged in engineering work without a course of instruction, desire to equip themselves for successful competition with those who have had such instruction.

In connection with the technical studies, liberal training is given in English, history, economics, pure mathematics, and the physical sciences. The course will also be found to embrace a considerable amount of drawing, shop work, and short courses in electrical engineering and mechanical engineering.

The distinctive work pursued by students in this course includes the field and office work of surveying and leveling; topographic surveying and drafting; the location and construction of railroads and highways, bridges, and other related structures; investigation of the strength of the materials of construction and the theories involved in their use; masonry construction; foundations on land and under water; a particular study of highway engineering, including a laboratory course covering all the standard tests of highway material, both bituminous and non-bituminous; municipal and sanitary engineering, including the study of bacteriology, water-supply, sewerage and drainage; and a brief study of engineering law relating to contracts and specifications. Actual design, as well as analytic investigation, is given in all cases.

A summer surveying camp of two weeks duration is required between the sophomore and junior years.

CIVIL ENGINEERING

Freshman Year

First Semester			*Second Semester*		
Gen. Chem. 11, General	3⅔	(3,2)	Gen. Chem. 12, General	3⅔	(3,2)
Drawing 13, Engr. Drawing	1⅓	(0,4)	Drawing 14, Engr. Drawing	1⅓	(0,4)
English 15, Comp. and Lit.	3	(3,0)	English 16, Comp. and Lit.	3	(3,0)
*History 14, Amer. Ec. Hist.	2	(2,0)	*Gov. 12, Amer. Nat'l. Gov't.	2	(2,0)
Math. 11, Trigonometry	3	(3,0)	Math. 12, Analytics	3	(3,0)
Math. 13, College Algebra	2	(2,0)	Math. 14, College Algebra	2	(2,0)
M. E. 17, or M. E. 12, Shop	2	(0,6)	M. E. 12, or M. E. 17, Shop	2	(0,6)
M. S. 11, Military Science	1⅔	(1,2)	M. S. 12, Military Science	1⅔	(1,2)
	18⅔			18⅔	

*Modern Language 3 Hr. Option.

Sophomore Year

C. E. 21, Surveying	2	(2,0)	C. E. 22, Surveying	3	(3,0)
C. E. 21a, Surveying Field and Office Work	1	(0,3)	C. E. 22a, Surveying Field and Office Work	⅔	(0,2)
Drawing 25, Mechanical	⅔	(0,2)	Drawing 28, Structural	⅔	(0,2)
English 21, Lit. and Adv. Comp.	2	(2,0)	English 22, Lit. and Adv. Comp.	2	(2,0)
Math. 21, Dif. Calculus	5	(5,0)	Math. 22, Int. Calculus	5	(5,0)
M. S. 21, Military Science	1⅔	(1,2)	M. S. 22, Military Science	1⅔	(1,2)
Econ. 23	2	(2,0)	Physics 22, 24, General	5	(4,3)
Physics 21, 23, General	5	(4,3)	*Elective	2	
	19⅓			20	

C. E. 80—Summer Surveying Camp. Two weeks, 3 credits.

*Suggest consultation with head of Department.

Junior Year

C. E. 31, Mechanics	3	(3,0)	C. E. 32, Mech. of Matr.	3	(3,0)
C. E. 35, Route Surveying	3	(3,0)	C. E. 34, Graphic Statics	1⅔	(1,2)
C. E. 37, Structural Stresses	1⅓	(0,4)	C. E. 36, Roads & Pavements	4	(3,3)
English 31, Pub. Speaking	2	(2,0)	C. E. 38, Struc. Design	2	(0,6)
M. E. 33, Mech. Engr.	3	(3,0)	E. E. 36, Elec. Mach.	3	(3,0)
M. E. 33a, Lab.	⅔	(0,2)	E. E. 36a, Elec. Lab.	⅔	(0,2)
M. S. 31, Military Science	⅔	(0,2)	M. S. 32, Military Science	⅔	(0,2)
Physics 33, Astronomy	2	(2,0)	Elective	2	
Elective	2			17	
	17⅔				

Senior Year

C. E. 41, Struct. Design	3	(2,3)	Bact. 42, Sanitary	3	(2,3)
C. E. 43, Road Mat. and Test.	1	(0,3)	C. E. 42, Structural Des.	4	(2,6)
C. E. 43.5, Foundations	2	(2,0)	C. E. 44, Road M. T. Lab.	1	(0,3)
C. E. 45, Reinf. Concrete	3	(2,3)	C. E. 46, Mun. and San. Engr.	5	(5,0)
C. E. 49, Hydraulics	3	(3,0)	English 32, Bus. Law	2	(2,0)
Geology 43, Engr. Geology	2	(2,0)	M. S. 42, Military Science	⅔	(0,2)
M. E. 42a, Hydro. & Mat. Lab.	⅔	(0,2)	Elective	2	
M. S. 41, Military Science	⅔	(0,2)		17⅔	
Elective	2				
	17⅓				

ELECTRICAL ENGINEERING

Engineering deals fundamentally with the control of the energies of nature. Electrical engineering is that branch of engineering which embraces the conversion of primary energy into electrical form, the transmission and the application of this energy to innumerable devices designed for human service. Some of the more notable applications are: domestic appliances, illumination, transportation, communication, and industry motorization.

The curriculum for students in electrical engineering contains a selected series of fundamental studies which enables the student to enter any division of the field of electrical engineering.

The first two years are devoted largely to basic sciences and other subjects prerequisite to the general field of engineering. The work of the last two years is more specialized and embraces those technical courses which are pertinent to electrical engineering. To satisfy individual interests and needs a certain amount of free election of courses is provided during the four years.

The theoretical courses in science and engineering are paralleled and reinforced by strong laboratory courses through which the student may make his own determinations of the characteristics of engineering materials and machines. The laboratories are well equipped for this work.

The entire course is directed toward the development of initiative and self-reliance, so that the student may enter his chosen field with reasonable hope of usefulness and success.

ELECTRICAL ENGINEERING

Freshman Year

First Semester			*Second Semester*		
Gen. Chem. 11, General	3⅔	(3,2)	Gen. Chem. 12, General	3⅔	(3,2)
Drawing 13, Engr. Drawing	1⅓	(0,4)	Drawing 14, Engr. Drawing	1⅓	(0,4)
English 15, Comp. and Lit.	3	(3,0)	English 16, Comp. and Lit.	3	(3,0)
*History 14, Amer. Ec. Hist.	2	(2,0)	*Gov. 12, Amer. Nat'l. Gov't.	2	(2,0)
Math. 11, Trigonometry	3	(3,0)	Math. 12, Analytics	3	(3,0)
Math. 13, College Algebra	2	(2,0)	Math. 14. College Algebra	2	(2,0)
M. E. 17, or M. E. 12, Shop	2	(0,6)	M. E. 12, or M. E. 17, Shop	2	(0,6)
M. S. 11, Military Science	1⅔	(1,2)	M. S. 12, Military Science	1⅔	(1,2)
	18⅔			18⅔	

*Modern Language 3 Hr. Option.

Sophomore Year

C. E. 23, Surveying	1	(1,0)	Drawing 26, Elem. Des. & Kin.	⅔	(0,2)
C. E. 23a, Surveying Field and Office Work	⅔	(0,2)	E. E. 22, D. C. Circuits	2	(2,0)
Drawing 25, Mechanical	⅔	(0,2)	English 22, Lit. and Adv. Comp.	2	(2,0)
Econ. 23, Economics	2	(2,0)	Math. 28, Calculus	3	(3,0)
English 21. Lit. and Adv. Comp.	2	(2,0)	Math. 32, Diff. Equa.	2	(2,0)
Math. 27, Calculus	5	(5,0)	M. E. 24, Mach. Shop	1	(0,3)
M. E. 23, Mach. Shop	1	(0,3)	M. S. 22, Military Science	1⅔	(1,2)
M. S. 21, Military Science	1⅔	(1,2)	Physics 22 and 24, General	5	(4,3)
Physics 21 and 23, General	5	(4,3)	Elective	2	
	19			19⅓	

Junior Year

Drawing 31, Kin. & Mach. Design	1	(0,3)	Drawing 32, Mach. Des.	1	(0,3)
E. E. 31, D. C. Machinery	5	(5,0)	E. E. 32, A. C. Circuits	5	(5,0)
E. E. 31a, Elec. Measurement	1⅓	(0,4)	E. E. 32a, Elec. Lab.	1⅓	(0,4)
Eng. 31, Public Speaking	2	(2,0)	M. E. 32, Mechanics	3	(3,0)
M. E. 31, Mechanics	3	(3,0)	M. E. 36, Thermodynamics	3	(3,0)
M. E. 35, Power Plants	3	(3,0)	M. E. 36b, Mech. Lab.	1	(0,3)
M. S. 31, Military Science	⅔	(0,2)	M. S. 32, Military Science	⅔	(0,2)
Elective	2		Elective	2	
	18			17	

Senior Year

E. E. 41, A. C. Mach.	5	(5,0)	E. E. 42, A. C. Machinery	3	(3,0)
E. E. 41a, Elec. Lab.	2	(1,3)	E. E. 42a, Elec. Lab.	2	(1,3)
E. E. 45, Elec. Design	1	(0,3)	E. E. 44, Power Trans.	3	(3,0)
E. E. 47, Electronics	2	(2,0)	E. E. 46, Elec. Design	1	(0,3)
M. E. 41, Mech. Engr.	2	(2,0)	English 32, Business Law	2	(2,0)
M. E. 41a, Mech. Lab.	1	(0,3)	M. E. 42.5, Hydraulics	2	(2,0)
M. E. 49, Mech. of Materials	3	(3,0)	M. S. 42, Military Science	⅔	(0,2)
M. S. 41, Military Science	⅔	0,2)	Elective	4	
Elective	2			17⅔	
	18⅔				

MECHANICAL ENGINEERING

The course in mechanical engineering is designed to give the graduate as broad training as possible and to fit him for some specific type of work.

It embraces practically all forms of engineering which have for their objects the application of the forces of nature to the accomplishment of the processes of industry. The course is designed to give an intimate knowledge of the materials used in engineering, the laws of mechanics, and the characteristics of various types of machinery.

The shop courses embrace wood work, forge work, foundry and machine work. The purpose of this instruction is not to turn out skilled workmen but to train those faculties of mind which may best be reached through the work of the hand, and to give the student a clear knowledge of the characteristics and possibilities of the materials used in engineering.

Considerable time is given to the study of the laws of the physical sciences, in such subjects as physics, chemistry, mechanics, electricity and magnetism, and thermodynamics.

During the fourth year stress is laid on the application of the fundamental principles already covered so that the graduate may be able to design or manage those types of machines which ordinarily come under the supervision of the mechanical engineer.

The mechanical engineer should have a liberal education; therefore, in addition to the regular technical work, training is given in English, history, economics, civics, and related subjects.

MECHANICAL ENGINEERING

FRESHMAN YEAR

First Semester

Gen. Chem. 11, General	3⅔	(3,2)
Drawing 13, Engr. Drawing	1⅓	(0,4)
English 15, Comp. and Lit.	3	(3,0)
*History 14, Amer. Ec. Hist.	2	(2,0)
Math. 11, Trigonometry	3	(3,0)
Math. 13, College Algebra	2	(2,0)
M. E. 17, or M. E. 12, Shop	2	(0,6)
M. S. 11, Military Science	1⅔	(1,2)
	18⅔	

Second Semester

Gen. Chem. 12, General	3⅔	(3,2)
Drawing 14, Engr. Drawing	1⅓	(0,4)
English 16, Comp. and Lit.	3	(3,0)
*Gov. 12, Amer. Nat'l. Gov't.	2	(2,0)
Math. 12, Analytics	3	(3,0)
Math. 14, College Algebra	2	(2,0)
M. E. 12, or M. E. 17, Shop	2	(0,6)
M. S. 12, Military Science	1⅔	(1,2)
	18⅔	

*Modern Language 3 Hr. Option.

SOPHOMORE YEAR

Drawing 25, Mechanical	⅔	(0,2)
Econ. 23, Economics	2	(2,0)
English 21, Lit. and Adv. Comp.	2	(2,0)
Math. 21, Dif. Calculus	5	(5,0)
M. E. 23, Mach. Shop	1	(0,3)
M. S. 21, Military Science	1⅔	(1,2)
Physics 21 and 23, General	5	(4,3)
Elective	2	
	19⅓	

C. E. 23, Surveying	1	(1,0)
C. E. 23a, Surveying Field and Office Work	⅔	(0,2)
Drawing 26, Elem. Des. and Kin.	⅔	(0,2)
English 22, Lit. and Adv. Comp.	2	(2,0)
Math. 22, Int. Calculus	5	(5,0)
M. E. 24, Mach. Shop	1	(0,3)
M. S. 22, Military Science	1⅓	(1,2)
Physics 22 and 24, General	5	(4,3)
Elective	2	
	19	

JUNIOR YEAR

Drawing 31, Kin. & Mach. Des.	1	(0,3)
E. E 33, D. C. Machinery	4	(4,0)
E. E. 33a, Elec. Measurements	1	(0,3)
English 31, Public Speaking	2	(2,0)
M. E. 31, Mechanics	3	(3,0)
M. E. 35, Power Plants	3	(3,0)
M. E. 35a, Mech. Lab.	1	(0,3)
M. S. 31, Military Science	⅔	(0,2)
Elective	2	
	17⅔	

Drawing 32, Mach. Design	1	(0,3)
E. E. 34, A. C. Circuits	4	(4,0)
E. E. 34a, Elec. Lab.	1	(0,3)
M. E. 32, Mechanics	3	(3,0)
M. E. 36, Thermodynamics	3	(3,0)
M. E. 36a, Mech. Lab.	1	(0,3)
M. E. 38, Ind. Engr.	2	(2,0)
M. S. 32, Military Science	⅔	(0,2)
Elective	2	
	17⅔	

SENIOR YEAR

E. E. 43, A. C. Machinery	3	(3,0)
E. E. 43a, Elec. Lab.	1	(0,3)
M. E. 43, Power Plants	3	(3,0)
M. E. 43a, Mech. Lab.	1⅓	(0,4)
*M. E. 45, Gas Engines	2	(2,0)
*M. E. 45a, Design	1	(0,3)
M. E. 49, Mechan. of Materials	3	(3,0)
M. S. 41, Military Science	⅔	(0,2)
Elective	2	
	17	
*M. E. 47, Heat and Vent.	2	(2,0)
*M. E. 47a, Design	1	(0,3)

English 32, Business Law	2	(2,0)
M. E. 42, Hydraulics	3	(3,0)
M. E. 42a, Hydro. and Mat. Lab.	⅔	(0,2)
M. E. 44, Power Plants	3	(3,0)
M. E. 44a, Lab.	1⅓	(0,4)
*M. E. 46, Steam Turbines	2	(2,0)
*M. E. 46a, Design	1	(0,3)
M. S. 42, Military Science	⅔	(0,2)
**Elective	4	
	17⅔	
*M. E. 48, Heat and Vent.	2	(2,0)
*M. E. 48a, Design	1	(0,3)

*M. E. 47, 47a, 48, 48a are optional in place of M. E. 45, 45a, 46, 46a.
**Two credit hours of electives must be approved by head of Department.

SCHOOL OF GENERAL SCIENCE

The School of General Science offers four-year courses both in General Science and in Pre-Medicine. The course in General Science is planned to meet the needs of students desiring general training in the sciences. It is recommended for men preparing themselves for the professions and it is also available for capable men who find themselves unsuited for technical and vocational courses. The course in Pre-Medicine is described on page 84.

GENERAL SCIENCE

Freshman Year

First Semester		*Second Semester*	
Botany 11, General ____ 3⅓	(2,4)	Gen. Chem. 12, General ____ 3⅔	(3,2)
Gen. Chem. 11, General ____ 3⅔	(3,2)	English 16, Comp. and Lit. ____ 3	(3,0)
English 15, Comp. and Lit. ____ 3	(3,0)	Gov. 12, Amer. Gov't. ____ 2	(2,0)
History 14, Am. Econ. History ____ 2	(2,0)	M. S. 12, Military Science ____ 1⅔	(1,2)
M. S. 11, Military Science ____ 1⅔	(1,2)	Modern Language ____ 3	(3,0)
Modern Language ____ 3	(3,0)	Math. 12, Analytics ____ 3	(3,0)
Math. 11, Trigonometry ____ 3	(3,0)	Zool. 12, Gen. Zoology ____ 3⅓	(2,4)
	19⅔		19⅔

Sophomore Year

English 21, Lit. and Adv. Comp. ____ 2	(2,0)	English 22, Lit. and Adv. Comp. ____ 2	(2,0)
Geology 23, or Natural Science ____ 3	(3,0)	M. S. 22, Military Science ____ 1⅔	(1,2)
M. S. 21, Military Science ____ 1⅔	(1,2)	Modern Language (Cont.) ____ 3	(3,0)
Modern Language (Cont.) ____ 3	(3,0)	Nat. Science, or Approved Elect. ____ 3	(3,0)
Math. 21, or Approved Elective ____ 5	(5,0)	Math. 22, or Approved Elective ____ 5	(5,0)
Physics 11, 15, General ____ 3⅔	(3,2)	Physics 12, 16, General ____ 3⅔	(3,2)
	18⅓		18⅓

Junior Year

English 31, Public Speaking ____ 2	(2,0)	English 32, Business Law ____ 2	(2,0)
History 31, Hist. of Civiliz. ____ 3	(3,0)	History 32, Hist. of Civiliz. ____ 3	(3,0)
M. S. 31, Military Science ____ ⅔	(0,2)	M. S. 32, Military Science ____ ⅔	(0,2)
Psychol. 35, Psychology ____ 3	(2,2)	Psychol. 36, Psychology ____ 3	(2,2)
Approved Elective ____ 6		Approved Elective ____ 6	
Free Elective ____ 3		Free Elective ____ 2⅓	
	17⅔		17

Senior Year

Econ. 23, Economics ____ 2	(2,0)	Econ. 24, Economics ____ 2	(2,0)
English 50, Thesis ____ ⅔	(0,2)	M. S. 42, Military Science ____ ⅔	(0,2)
M. S. 41, Military Science ____ ⅔	(0,2)	Sociol. 31, Sociology ____ 2	(2,0)
Approved Elective ____ 10		Approved Elective ____ 8	
Free Elective ____ 5		Free Elective ____ 4⅓	
	18⅓		17

Approved Electives: Approved electives shall consist of those courses offered in the School of General Science and such other courses as are approved by a committee consisting of the Dean and class advisers of the School of General Science.

Additional Requirements

Modern Language. For graduation in this course at least the second year of one foreign language must be completed in college.

Electives. Of the minimum of one hundred and forty-six semester credit hours required for graduation, not more than fourteen and two-thirds may be free electives. All other courses selected by the student must be from the list of approved electives. The approved electives must include at least eight hours, exclusive of required courses, in one of the following: calculus, chemistry, or physics; and at least eight hours, exclusive of required courses, in one of the following: economics and government and history, English, modern languages, or sociology and psychology.

Majors and Minors. For graduation in this course a major of at least twenty semester hours and a minor of at least fourteen semester hours must be completed, respectively, in two of the following fields: economics and government and history, English, mathematics, modern language, physics, and sociology and psychology. The credit hours which constitute the major and minor, respectively, may include the required subjects, approved electives, and the eight-hour requirements outlined above.

PRE-MEDICAL COURSE

The course in Pre-Medicine is designed to meet the general entrance requirements of standard medical colleges. Since, however, requirements for entrance to various medical schools are not uniform, the student before choosing his electives should consult the specific requirements of the medical college of his preference.

Those preparing for the study of medicine are advised to complete four years of undergraduate work before entering a medical school. Clemson College, however, will award the degree of Bachelor of Science in Pre-Medicine to a student who, after completing all requirements of the first three years of the Pre-Medical Course, is graduated from a medical college approved by the American Medical Association, provided that during his three years at Clemson he has elected and received credit for Economics 23 and 24 and for Sociology 31.

PRE-MEDICINE

Freshman Year

(Same as General Science. See page 83)

Sophomore Year

First Semester		*Second Semester*	
Drawing 11, Freehand ⅔	(0,2)	Eng. 22, Lit. and Adv. Comp. 2	(2,0)
Eng. 21, Lit. and Adv. Comp. 2	(2,0)	German 22 or French 22 3	(3,0)
German 21 or French 21 3	(3,0)	Math. 24, Int. Calculus 3	(3,0)
Math. 23, Dif. Calculus 3	(3,0)	Org. Chem. 22, Organic 5	(3,6)
Org. Chem. 21, Organic 5	(3,6)	M. S. 22, Military Science 1⅔	(1,2)
M. S. 21, Military Science 1⅔	(1,2)	Physics 12 and 18, General 4	(3,3)
Physics 11 and 17, General 4	(3,3)		
19⅓		18⅔	

Junior Year

English 31, Public Speaking 2	(2,0)	Anal. Chem. 24, Quant. Anal. 3	(2,3)
History 31, Hist. of Civiliz. 3	(3,0)	English 32, Business Law 2	(2,0)
M. S. 31, Military Science ⅔	(0,2)	History 32, Hist. of Civiliz. 3	(3,0)
Anal. Chem. 23, Qualitative 3	(2,3)	M. S. 32, Military Science ⅔	(0,2)
Psychol. 35, Psychology 3	(2,2)	Psychol. 36, Psychology 3	(2,2)
Zoology 33, Adv. Zool. 2⅔	(2,2)	Zoology, or Approved Elective 2⅔	
*Elective 4		*Elective 4	
18⅓		18⅓	

Senior Year

Bact. 31, or Approved Elective 3⅓	(2,4)	Econ. 24, Economics 2	(2,0)
Econ. 23, Economics 2	(2,0)	Phys. Chem. 32, or Approved Elective 3	
Sociol. 31, Sociology 2	(2,0)	Org. Chem. 42, or Approved Elective 2	
Phys. Chem. 31, or Approved Elective 3		M. S. 42, Military Science ⅔	(0,2)
Org. Chem. 41, or Approved Elective 2		*Elective 8⅓	
M. S. 41, Military Science ⅔	(0,2)	16	
*Elective 4⅓			
17⅓			

*Of all elective courses not more than fourteen and two-thirds hours may be free elective. All other courses selected by the student must be from the list of General Science approved electives.

SCHOOL OF TEXTILES

Three fourths of the active cotton spindles in the United States are in operation in the South. This activity in textiles in the cotton growing states has brought about a greatly increased demand for men especially trained in the different branches of the textile industry. To meet this demand, the Clemson Textile School has so organized its curriculum as to offer special training in four main departments: (1) Carding and Spinning, (2) Weaving and Designing, (3) Textile Chemistry and Dyeing, and (4) Textile Management.

Courses in the Carding and Spinning Department deal with the various manufacturing processes by which cotton in the bale becomes yarn suitable for weaving, knitting, dyeing, and mercerizing. The Department of Weaving and Designing deals with the principles of weaving and the design and construction of various types of fabric with respect to design, color, appearance and draping qualities. The Department of Textile Chemistry and Dyeing presents the fundamentals of chemistry and dyeing with reference to textiles made of various fibers such as cotton, rayon, and wool. The courses offered in the Department of Textile Management deal with such subjects as cost finding, textile management, textile research and testing, and textile organization and personnel problems. For further details of subject matter of these various courses, see description of courses in the second half of this catalog.

Students may major in any one of the following three major courses in textiles: (1) textile engineering, (2) weaving and designing, (3) textile chemistry and dyeing. For more complete information on these majors, see the following pages.

Throughout the four years, the theory taught is supplemented by practical work with regular textile equipment in the college plant. This is done with the view of combining theory and practice and developing in the student habits of accurate observation and some skill in manipulation of the machines involved. In this work special consideration is given to economy of time, pre-

cision of results, and attention to details, as well as to methods of fundamental importance.

Students in the School of Textiles are encouraged to work in the industry during their vacation periods in order to get the practical mill experience which is necessary for advancement in the industry. This practical experience assists the student in understanding the theory underlying the manufacturing practices.

The textile course in its entirety has been cooperatively developed by men who have not only had textile training but have had practical experience in the industry in their respective fields. This textile course so equips the graduate that he may confidently look forward to a successful career provided he supplements his training with the necessary energy, application, and tact.

TEXTILE ENGINEERING

The course in textile engineering is designed to give the student sound training, both theoretical and practical, in the sciences upon which manufacturing processes are based. It is a well-rounded course in that the strictly textile subjects are supplemented by related fundamental engineering subjects as well as by subjects of general educational value. (See SCHOOL OF TEXTILES for additional information.) All courses in yarn manufacturing for freshmen, sophomores, and juniors are offered both semesters.

TEXTILE ENGINEERING

Freshman Year

First Semester			*Second Semester*		
Gen. Chem. 11, General	3⅔	(3,2)	Gen. Chem. 12, General	3⅔	(3,2)
Drawing 13, Engineering	1⅓	(0,4)	Drawing 14, Engineering	1⅓	(0,4)
English 15, Comp. & Lit.	3	(3,0)	English 16, Comp. & Lit.	3	(3,0)
History 14, Am. Ec. Hist.	2	(2,0)	Gov 12, Amer. Nat'l. Gov't.	2	(2,0)
Math. 11, Trigonometry	3	(3,0)	Math. 12, Analytics	3	(3,0)
Math. 13, College Algebra	2	(2,0)	Math. 14, College Algebra	2	(2,0)
M. E. 15, Woodwork	⅔	(0,2)	M. S. 12, Military Science	1⅔	(1,2)
M. S. 11, Military Science	1⅔	(1,2)	*W. D. 12, Textiles	1⅔	(1,2)
*Y. M. 11, Textiles	1⅔	(1,2)			
	19			18⅓	

Sophomore Year

Drawing 25, Mechanical	⅔	(0,2)
English 21, Lit. & Adv. Comp.	2	(2,0)
Math. 23, Dif. Calculus	3	(3,0)
M. E. 23, Machine Shop	1	(0,3)
M. S. 21, Military Science	1⅔	(1,2)
Physics 11 and 15, General	3⅔	(3,2)
W. D. 21, Elementary Design	2	(2,0)
W. D. 23, Weaving	⅔	(0,2)
*Y. M. 21, Pickers	2⅔	(2,2)
*Y. M. 23, Mill Problems	2	(2,0)
	19⅓	

Drawing 26, El. Des. & Kin.	⅔	(0,2)
English 22, Lit. & Adv. Comp.	2	(2,0)
*W. D. 26, Mill Problems	2	(2,0)
M. E. 24, Machine Shop	1	(0,3)
M. S. 22, Military Science	1⅔	(1,2)
Physics 12 and 16, General	3⅔	(3,2)
W. D. 22, Adv. Design	2	(2,0)
W. D. 24, Weaving	1	(0,3)
*Y. M. 22, Cards & Drawing Frames	2⅔	(2,2)
*Y. M. 28, Cotton Grading	⅔	(0,2)
	17⅓	

Junior Year

M. E. 31.5, Mechanics	3	(3,0)
E. E. 35, Elec. Mach.	2	(2,0)
E. E. 35a, Elec. Lab.	⅔	(0,2)
M. S. 31, Military Science	⅔	(0,2)
T. Chem. 31, Tex. Chem.	2⅔	(2,2)
W. D. 31, Design	2	(2,0)
W. D. 33, Fabric Analysis	1	(0,2)
W. D. 35, Weaving	⅔	(0,2)
*Y. M. 31, Roving Frames	2⅔	(2,2)
Electives	3	
	18⅓	

Eng. 32, Bus. Law	2	(2,0)
M. E. 34, Mech. Engr	3	(3,0)
M. E. 34a, Mech. Engr. Lab.	⅔	(0,2)
M. S. 32, Military Science	⅔	(0,2)
T. Chem. 32, Tex. Chem.	2⅔	(2,2)
T. M. 48, Microscopy	1⅓	(1,1)
W. D. 34, Fabric Analysis	1	(0,2)
W. D. 36, Weaving	⅔	(0,2)
*Y. M. 34, Spinning	3	(2,3)
Electives	2⅔	
	17⅔	

Senior Year

Economics 23, Economics	2	(2,0)
Eng. 31, Public Speaking	2	(2,0)
M. S. 41, Military Science	⅔	(0,2)
T. Chem. 41, Dyeing	2⅔	(2,2)
T. M. 41, Textile Costing	1⅔	(1,2)
T. M. 43, Textile Organization	1	(1,0)
*W. D. 41, Jac. Weaving	1⅔	(1,2)
W. D. 45, Pattern Weaving	⅔	(0,2)
*Y. M. 42, Combers	1⅔	(1,2)
Electives	4	
	18	

Sociol. 31, Sociology	2	(2,0)
M. S. 42, Military Science	⅔	(0,2)
T. Chem. 42, Dyeing	2⅔	(2,2)
T. M. 42, Textile Costing	2⅔	(2,2)
*T M. 44, Textile Management	2	(2,0)
T. M. 46, Textile Testing & Research	1	(1,0)
W. D. 44, Warp Preparation	2	(2,0)
W. D. 46, Weaving	⅔	(0,2)
W. D. 48, Knitting	⅔	(0,2)
Electives	2⅔	
	17	

*Offered both semesters.

TEXTILE CHEMISTRY AND DYEING

The many new chemical processes now available for use in the bleaching, dyeing, and finishing of textiles are largely responsible for the present demand for chemists in the textile industry. Such processes when properly executed give new, novel and desirable results; they require, however, the careful supervision of technically trained men.

This four-year course has been planned to give a thorough training in the fundamental theories of chemistry and dyeing with special emphasis on the application of these theories to the practical accomplishments of the textile industry. (See School of Textiles for additional information.)

TEXTILE CHEMISTRY AND DYEING

Freshman Year

First Semester			*Second Semester*		
Gen. Chem. 13, General	4⅓	(3,4)	Gen. Chem. 14, General	4⅓	(3,4)
Drawing 13, Engineering	1⅓	(0,4)	Drawing 14, Engineering	1⅓	(0,4)
English 15, Comp. & Lit.	3	(3,0)	English 16, Comp. & Lit.	3	(3,0)
History 14, Am. Ec. Hist.	2	(2,0)	Gov. 12, Amer. Nat'l. Gov't.	2	(2,0)
Math. 11, Trigonometry	3	(3,0)	Math. 12, Analytics	3	(3,0)
Math. 13, College Algebra	2	(2,0)	Math. 14, College Algebra	2	(2,0)
M. S. 11, Military Science	⅔	(1,2)	M. S. 12, Military Science	⅔	(1,2)
*Y. M. 11, Textiles	⅔	(1,2)	*W. D. 12, Textiles	⅔	(1,2)
	19			19	

Sophomore Year

Anal. Chem. 21, Qualitative	4	(2,6)	Anal. Chem. 22, Quantitative	4	(2,6)
Eng. 21, Lit. and Adv. Comp.	2	(2,0)	Eng. 22, Lit. and Adv. Comp.	2	(2,0)
Math. 23, Diff. Calculus	3	(3,0)	Math. 24, Int. Calculus	3	(3,0)
Physics 11, 15, General	3⅔	(3,2)	Physics 12, 16, General	3⅔	(3,2)
W. D. 21, Elem. Design	2	(2,0)	W. D. 22, Adv. Design	2	(2.0)
W. D. 23, Weaving	⅔	(0,2)	W. D. 24, Weaving	1	(0,3)
M. S. 21, Military Science	⅔	(1,2)	M. S. 22, Military Science	⅔	(1,2)
*Y. M. 28, Cotton Grading	⅔	(0,2)			
	17⅔			17⅓	

*Offered both semesters.

Junior Year

Phys. Chem. 31, Physical	3	(3,0)	Phys. Chem. 32, Physical	3	(3,0)
Econ. 23, Economics	2	(2,0)	Sociol. 31, Sociology	2	(2,0)
Eng. 31, Pub. Speaking	2	(2,0)	Eng. 32, Business Law	2	(2,0)
T. C. 35, Textile Chemistry	5	(4,3)	T. C. 38, Textile Chemistry	5	(4,3)
*T. M. 48, Microscopy	1⅓	(1,1)	Anal. Chem. 31, Adv. Quantitative	1⅓	(0,4)
M. S. 31, Military Science	⅔	(0,2)	M. S. 32, Military Science	⅔	(0,2)
Electives	4⅔		Anal. Chem. 46, Stoichiometry	2	(2,0)
			Electives	2	
	18⅔			18	

Senior Year

T. C. 41.5 Dyeing	5⅓	(4,4)	T. C. 42.5 Dyeing	5⅓	(4,4)
T. C. 43, Cellulose	2	(2,0)	T. C. 48, Synthetic Fibers	2	(2,0)
T. C. 45, Textile Anal.	2	(1,3)	T. C. 46,, Textile Anal.	2	(1,3)
Phys. Chem. 41, Colloids	2	(2,0)	Phys. Chem. 42, Colloids	2	(2,0)
T. M. 43, Tex. Org.	1	(1,0)	T. M. 46, Tex. Test.	1	(1,0)
M. S. 41, Military Science	⅔	(0,2)	M. S. 42, Military Science	⅔	(0,2)
T. C. 50, Thesis	1	(0,3)	T. C. 51, Thesis	1	(0,3)
Electives	3⅔		Electives	3	
	17⅔			17	

*Offered both semesters.

WEAVING AND DESIGNING

This course has been provided to meet a growing demand from those who desire special instruction relating to the weav-

ing and designing of fabrics. Special attention is paid to decorative design, dobby design, Jacquard design, pattern weaving, and rayon processing. (See School of Textiles, for additional information.)

WEAVING AND DESIGNING

Freshman Year

(Same as Textile Engineering. See page 87)

Sophomore Year

First Semester		*Second Semester*	
Drawing 25, Mechanical	⅔ (0,2)	Arch. 14, Drawing	1⅓ (0,4)
English 21, Lit. & Adv. Comp.	2 (2,0)	English 22, Lit. & Adv. Comp.	2 (2,0)
Math. 23, Dif. Calculus	3 (3,0)	M. E. 24, Machine Shop	1 (0,3)
M. E. 23, Machine Shop	1 (0,3)	M. S. 22, Military Science	1⅔ (1,2)
M. S. 21, Military Science	1⅔ (1,2)	Physics 12 and 16, General	3⅔ (3,2)
Physics 11 and 15, General	3⅔ (3,2)	W. D. 22, Advanced Des.	2 (2,0)
W. D. 21, Elem. Design	2 (2,0)	W. D. 24, Weaving	1 (0,3)
W. D. 23, Weaving	⅔ (0,2)	*Y. M. 22, Cards & Drawing Frames	2⅔ (2,2)
*Y. M. 21, Pickers	2⅔ (2,2)	*Y. M. 24, Mill Problems	2 (2,0)
*W. D. 25, Mill Problems	2 (2,0)	*Y. M. 28	⅔ (0,2)
	19⅓		18

Junior Year

Arch. 23.5 Dec. Des. & Color	1 (0,3)	Arch. 24.5, Dec. Des. & Color	1 (0,3)
E. E. 35, Elec. Mach.	2 (2,0)	English 32, Business Law	2 (2,0)
E. E. 35a, Elec. Lab.	⅔ (0,2)	M. E. 34, Mech. Engr.	3 (3,0)
M. S. 31, Military Science	⅔ (0,2)	M. E. 34a, M. E. Lab.	⅔ (0,2)
M. E. 31, Mechanics	3 (3,0)	M. S. 32, Military Science	⅔ (0,2)
W. D. 31, Dobby Design	2 (2,0)	W. D. 32, Adv. Dobby Des.	2 (2,0)
W. D. 33, Fabric Analysis	1 (0,2)	W. D. 34, Fabric Analysis	1 (0,2)
W. D. 35, Weaving	⅔ (0,2)	W. D. 36, Weaving	⅔ (0,2)
W. D. 37, Rayon Processing	1⅔ (1,2)	*Y. M. 34, Spinning	3 (2,3)
*Y. M. 31, Roving Frames	2⅔ (2,2)	Electives	3
Electives	3		
	18⅓		17

Senior Year

Arch. 33.5, Dec. Des. & Comp.	1 (0,3)	Sociology 31, Sociology	2 (2,0)
Econ. 23, Economics	2 (2,0)	M. S. 42, Military Science	⅔ (0,2)
English 31, Public Speaking	2 (2,0)	T. Chem. 40, Dyeing	⅔ (0,2)
M. S. 41, Military Science	⅔ (0,2)	T. M. 42, Textile Costing	2⅔ (2,2)
T. Chem. 39, Dyeing	⅔ (0,2)	T. M. 46, Tex. Test. & Research	1 (1,0)
T. M. 41, Textile Costing	1⅔ (1,2)	T. M. 48, Textile Microscopy	1⅓ (1,1)
*T. M. 44, Textile Management	2 (2,0)	W. D. 42, Jacquard Design	2⅓ (1,4)
*W. D. 41, Jacquard Weaving	1⅔ (1,2)	W. D. 44, Warp Preparation	2 (2,0)
W. D. 45.5, Pattern Weaving	2 (0,6)	W. D. 46.5, Pattern Weaving	2 (0,6)
Electives	4	W. D. 48, Knitting	⅔ (0,2)
	17⅔	Electives	2
			17⅓

*Offered both semesters.

SCHOOL OF VOCATIONAL EDUCATION

The School of Vocational Education offers four-year curricula leading to the degree of Bachelor of Science in Vocational Agricultural Education, Education, Industrial Education, and Textile Industrial Education. Courses are also made available for students of the other Schools of the College. By making a proper program of studies it is possible for students to meet the professional requirements in subject matter and in education and to qualify for the teacher's certificate in this State. Students who are planning to teach in high schools are advised to plan not only their courses in education, but also their subject-matter courses so as to fulfill the State requirements for the particular type of work which they expect to teach in the state. (The office of the School of Vocational Education has a file of information on this subject.) Students who are interested are invited to consult the Dean and other members of the Vocational Education staff for information.

Practice teaching in several subjects, in cooperation with the State Department of Education and nearby school systems, constitutes part of the student's training. Students should plan this work well in advance so that they may conform to the schedule of the high school including registration at the opening of school. Publishers of State-adopted textbooks have been invited to place copies of their publications on file in the Education library, and many have responded. These publications are available for examination by teachers and prospective teachers during the regular session and during summer school.

While employment cannot be guaranteed, the School of Vocational Education maintains a Teacher Placement Service with which students who desire aid in securing employment may register and from which superintendents of schools and other employers may receive assistance in communicating with, or interviewing prospective teachers. Both students and employers of teachers are invited to use this service. The Office of the Teacher Placement Service is in Room 103, Education Building.

VOCATIONAL AGRICULTURAL EDUCATION

The curriculum in Agricultural Education is designed to give the student a cross-section of the types of agriculture in the State and to provide an opportunity to study agriculture from the standpoint of the teacher, the practical farmer, and the closely related agricultural business man where the farm as a unit is emphasized.

Professional training of the student is planned to provide an opportunity for the study of a cross-section of rural life and its organizations with particular emphasis on the contribution of the public school. Students participate in community organizations as a part of their first-hand training. They are taught to cooperate with State and National organizations which affect rural life and agriculture directly and indirectly. This curriculum with the central aim on teaching is designed primarily to train students for the professional field of teaching vocational agriculture and other closely related fields in which a knowledge of the business of farming is essential, and in which skill in dealing with groups of people as well as with individuals is important.

One hundred forty semester hours of credit are required for graduation. A minimum of fifty-eight semester hours of courses in technical agriculture are required. These fifty-eight semester hours of technical agriculture are to be distributed among ten major phases of agriculture with a minimum distribution of semester hours as follows: Agricultural Economics and Rural Sociology, 11 2/3; Agricultural Engineering, 4 2/3; Agronomy, 11 2/3; Animal Husbandry, 8 1/3; Plant Pathology, 2 2/3; Dairy Husbandry, 2 2/3; Applied Entomology, 2 2/3; Horticulture, 8 1/3; Poultry Husbandry, 2 2/3; Veterinary Science, 2 2/3. Additional hours may be elected in any one of these branches. Twelve semester hours of free electives are allowed.

In view of the emphasis now being given to farm shop work in the departments of vocational agriculture in the public schools,

the staff in Vocational Agricultural Education is recommending and urging students majoring in this department to complete six semester hours of farm mechanics in addition to the hours required in the curriculum. These six semester hours of farm mechanics may be counted towards the twelve hours of free electives, and should be completed in summer school between the freshman and sophomore years or between the sophomore and junior years. They should be completed before students enroll in Vocational Agricultural Education 31 which is offered during the first semester of the junior year. Students and teachers of vocational agriculture interested in shop training should see the 1941 summer school catalog for description of courses.

Teachers of agriculture and others who are intersted in advanced training in Agricultural Education should procure a copy of the 1941 summer school catalog as soon as published. A number of the courses listed in the Agricultural Education curriculum and other appropriate courses in Agricultural Education will be offered in the 1941 summer session.

VOCATIONAL AGRICULTURAL EDUCATION

Freshman Year

First Semester			*Second Semester*		
Agr. 11, Field Crops	3	(3,0)	A. H. 12, Types, Breeds & Mkt. Classes	2⅔	(2,2)
Gen. Chem. 11, General	3⅔	(3,2)	Bot. 16, Agricultural	3⅓	(2,4)
Draw. 11, Freehand	⅔	(0,2)	Gen. Chem. 12, General	3⅔	(3,2)
Eng. 15, Comp. & Lit.	3	(3,0)	Draw. 12, Mechanical	⅔	(0,2)
Math. 19, Applied Math.	3	(3,0)	Eng. 16, Comp. & Lit.	3	(3,0)
M. S. 11, Mil. Science	1⅔	(1,2)	Gov. 12, Amer. Nat'l. Gov't.	2	(2,0)
Voc. Ed. 11, Orientation	1	(1,0)	M. S. 12, Military Science	1⅔	(1,2)
Zoology 21, Gen. Zoology	2⅔	(2,2)			
	18⅔			17	

Sophomore Year

Ag. Ec. 22, Ag. Econ.	3	(3,0)	Agr. 20, Soils	2⅔	(2,2)
Ag. Engr. 22, Farm Mach.	2⅔	(2,2)	Dairy 21, Dairying	2⅔	(2,2)
Org. Chem. 25, Organic	2	(2,0)	Eng. 22, Lit. & Adv. Comp.	2	(2,0)
Eng. 21, Lit. & Adv. Comp.	2	(2,0)	Geol. 21, Agric.	3	(3,0)
Hort. 22, General Hort.	3	(2,3)	M. S. 22, Military Science	1⅔	(1,2)
M. S. 21, Military Science	1⅔	(1,2)	Phys. 16 and 27, General	3⅔	(3,2)
Electives	3		Voc. Ed. 22, Int. to Voc. Ed.	1	(1,0)
	17⅓			16⅔	
Suggested Electives:			Suggested Electives:		
Bact. 31, Gen. Bact.	3⅓	(2,4)	Econ. 24, Prin. of Econ.	2	(2,0)
Econ. 23, Prin. of Econ.	2	(2,0)	Econ. 32, Money & Banking	3	(3,0)
Hist. 14, Am. Ec. Hist.	2	(2,0)	Hist. 14, Am. Econ. Hist.	2	(2,0)
Rel. 23, Life of Christ	2	(2,0)			

Junior Year

Agr. 31, Fertilizers	2	(2,0)	Ag. Ec. 32, Farm Org. & Mgt.	2⅔	(2,2)
A. H. 31, Feeds & Feed.	3	(3,0)	Ag. Engr. 38, Soil Consv.	2	(1,3)
Eng. 31, Pub. Speak.	2	(2,0)	M. S. 32, Military Science	⅔	(0,2)
M. S. 31, Mil. Science	⅔	(0,2)	Voc. Ed. 30, Ed. Psych.	3	(3,0)
P. H. 32, Farm Poultry	2⅔	(2,2)	Z. & E. 31, Int. & Appl. Ent.	2⅔	(2,2)
Voc. Ed. 31, Int. to Ag. Ed.	3	(1,6)	Electives	7⅓	
Electives	5⅓				
	18⅔			18⅓	
Suggested Electives:			Suggested Electives:		
*Ag. Ec. 31, Stat. Methods	3	(3,0)	*A. H. 34, Pork Production	2⅔	(2,2)
*Ag. Ec. 35, Cooperation in Agriculture	3	(3,0)	*Hort. 32, Landscape Des.	2⅔	(2,2)
*Agr. 33, Forage Crops	3	(3,0)	*A. H. 32, Judging	1	(0,3)
*A. H. 35, Farm Meats	2	(0,6)	A. H. 42, Sheep Production	2⅔	(2,2)
*A. H. 37, Horse & Mule Pr.	2⅔	(2,2)	Eng. 32, Bus. Law	2	(2,0)
Dairy 31, Judging	1	(0,3)	*Z. & E. 44, Beekeeping	2⅔	(2,2)
*Hort. 31, Plant Prop.	2⅔	(2,2)			
*Hort. 33, Prod. of Hort. Crops	2⅔	(2,2)			
Soc. 31, Elem. Soc.	2	(2,0)			

Senior Year

Bot. 45, Plant Pathology	2⅔	(2,2)	M. S. 42, Military Science	⅔	(0,2)
M. S. 41, Military Science	⅔	(0,2)	Voc. Ed. 40, Pract. Teach.	5	(0,15)
Voc. Ed. 41, Prin. Voc. Ed.	4	(1,9)	Voc. Ed. 42, Meth. in Ag. Ed.	3	(3,0)
Electives	10		Vet. Sci. 42, Ani. Diseases	2⅔	(2,2)
			Electives	4⅔	
	17⅓			16	
Suggested Electives:			Suggested Electives:		
*Ag. Ec. 41, Prin. of Mkt.	3	(3,0)	*Ag. Ec. 42, Rural Sociol.	3	(3,0)
*Ag. Ec. 43, Fin. & Acct.	3	(3,0)	*Agr. 42, Soil Fert. & Mgt.	2	(2,0)
*Agr. 43, Farm Problems	2	(2,0)	*Hort. 52, Com. Pomology	2⅔	(2,2)
*Agr. 45, Crop Nutrition	2	(2,0)	*Hort. 54, Truck Crops	2⅔	(2,2)
*Agr. 53, Cotton	2	(2,0)	P. H. 42, Poultry Prod. & Mg.	2⅔	(2,2)
*A. H. 43, Beef Prod.	2⅔	(2,2)			
*A. H. 45, Judging	1	(0,3)			
Vet. Sci. 41, Anat. & Phy.	2⅔	(2,2)			

*These courses will be scheduled for students majoring in Vocational Agricultural Education.

EDUCATION

The purpose of this curriculum is to train for high school teaching in the fields indicated below. The curriculum has been planned with the view of providing both subject matter and professional courses. It meets the State requirements for certification in South Carolina under the new regulations. The subject-matter fields are designated as teaching majors and teaching minors. The technical and vocational groups are included with the purpose of providing an occupational background for teachers. Free electives are included to permit the student to exercise his own choice in at least a part of his work. Students who desire to enter into the Vocational Agriculture field or the Industrial Education field should enroll in one of those specialized curricula. (See pages 92 and 96). The Education Curriculum, with appropriate electives, provides excellent preparation for teachers of physical education. (See Voc. Ed. 33, 49.5, 58, 64, etc.)

For the degree of Bachelor of Science in Education the following grouping must be made: a teaching major of 20 semester hours; a first teaching minor of at least 12 semester hours; a second teaching minor of at least 12 semester hours (the semester hours in the teaching major and teaching minor groups may include required subjects in these fields as indicated below); at least 12 semester hours in a vocational or technical field, and 12 semester hours free electives are also required. Other elections are subject to the approval of the Dean. A total of 140 semester hours is required for graduation. The groups of teaching majors, teaching minors, etc., are indicated below.

EDUCATION

Freshman Year

First Semester		*Second Semester*	
Botany 13, Agricultural	2⅔ (2,2)	Botany 14, Agricultural	3⅓ (2,4)
Gen. Chem. 11, General	3⅔ (3,2)	Gen. Chem. 12, General	3⅔ (3,2)
English 15, Comp. and Lit.	3 (3,0)	English 16, Comp. and Lit.	3 (3,0)
History 14, Am. Econ. Hist.	2 (2,0)	Gov. 12, Amer. Nat'l. Gov't.	2 (2,0)
Math. 11, Trigonometry	3 (3,0)	Math. 12, Analytics	3 (3,0)
Math 13, College Algebra	2 (2,0)	Math. 14, College Algebra	2 (2,0)
M. S. 11, Military Science	1⅔ (1,2)	M. S. 12, Military Science	1⅔ (1,2)
Vocational Education	2		
	20		18⅔

Sophomore Year

Bact. 31, General Bacteriology	3⅓	(2,4)	
English 21, Lit. and Adv. Comp.	2	(2,0)	
Org. Chem. 23 or Anal Chem. 21	3	(2,3)	
M. S. 21, Military Science	1⅔	(1,2)	
Physics 11-15 or 21-23	3⅔ or 5	(3,2)	
Zool. 21, Gen. Zoology	2⅔	(2,2)	
Voc. or Tech. group	3		
	19⅓ or 20⅔		

Econ. 24, Economics	2	(2,0)
English 22, Lit. and Adv. Comp.	2	(2,0)
Org. Chem. 24 or Anal. Chem. 22	3	(2,3)
M. S. 22, Military Science	1⅔	(1,2)
Physics 12-16 or 22-24	3⅔ or 5	(3,2)
Voc. or Tech. group	3	
Free electives	2	
	17⅓ or 18⅔	

Junior Year

English 31, Public Speaking	2	(2,0)	
Ent. 31, Int. to Appl. Ent.	2⅔	(2,2)	
M. S. 31, Military Science	⅔	(0,2)	
Voc. Ed. 35, Psychology	3	(2,2)	
Voc. Ed. 39, Principles	3	(3,0)	
Voc. or Tech. group	3		
Teaching Major and Minor	2⅔		
	17		

Sociol. 31, Sociology	2	(2,0)
M. S. 32, Military Science	⅔	(0,2)
Voc. Ed. 45, Teach. Science	3	(3,0)
Voc. or Tech. group	3	
Teaching Major and Minor	4	
Free electives	4	
	16⅔	

Senior Year

M. S. 41, Military Science	⅔	(0,2)	
Voc. Ed. 49, Health and P. Ed.	2	(2,0)	
Voc. Ed. 51, Pract. Teaching	3	(0,6)	
Voc. Ed. 59, Administration	2	(2,0)	
Teaching Major and Minor	6		
Free electives	2		
	15⅔		

M. S. 42, Military Science	⅔	(0,2)
Voc. Ed. 47, Hist. & Philos. of Education	2	(2,0)
Voc. Ed 52 Pract. Teaching	3	(0,6)
Teaching Major and Minor	5⅔	
Free electives	4	
	15⅓	

I TEACHING MAJORS: 1. Biological Science, including Botany, Bacteriology, and Zoology. 2. Chemistry. 3. Mathematics. 4. Physics. 5. Social Science.

II TEACHING MINORS: First Teaching Minor: One of these above not classed as major.
Second Teaching Minor: Social Science, including History, Economics.

III VOCATIONAL OR TECHNICAL GROUPS

1. Agriculture—Agronomy, Animal Husbandry, Bacteriology and Botany, Horticulture, Poultry.
2. Textiles—Textile Chemistry, Weaving and Designing, Yarn Manufacturing.
3. Engineering—Architecture, Drawing, Civil, Electrical, Mechanical.

INDUSTRIAL EDUCATION

The curriculum in Industrial Education is intended to prepare students to teach industrial subjects, industrial arts, drawing, manual training, metal work, etc., in the high schools and to supervise the teaching of evening trade classes. The four-year curriculum includes the study of the major industries of South Carolina. The freshman year includes training in textiles. Students who complete this curriculum are prepared to teach in-

dustrial arts, manual training, drawing, woodwork, home mechanics, general subjects, and mathematics. A total of 140 semester hours is required for graduation. Provision is made for 12 semester hours free electives.

There has been, and is at present, an unusual demand for Clemson men trained in this field.

INDUSTRIAL EDUCATION

Freshman Year

First Semester		*Second Semester*	
Gen. Chem. 11, General 3⅔	(3,2)	Gen. Chem. 12, General 3⅔	(3,2)
Drawing 13, Engineering 1⅓	(0,4)	Drawing 14, Engineering 1⅓	(0,4)
English 15, Comp. & Lit. 3	(3,0)	Eng. 16, Comp. & Lit. 3	(3,0)
History 14, Am. Ec. Hist. 2	(2,0)	Gov. 12, Amer. Nat'l. Gov't. 2	(2,0)
Math. 15, College Algebra 3	(3,0)	Math. 11, Trigonometry 3	(3,0)
M. E. 17, or 12, Shop 2	(0,6)	M. E. 12, or 17, Shop 2	(0,6)
M. S. 11, Military Science 1⅔	(1,2)	M. S. 12, Military Science 1⅔	(1,2)
Voc. Ed. 11, Orientation 1	(1,0)	W. D. 12, Gen. Textiles 1⅔	(1,2)
Y. M. 11, Gen. Textiles 1⅔	(1,2)		
	19⅓		18⅓

Summer industrial employment minimum of four weeks.

Sophomore Year

C. E. 23, Surveying 1	(1,0)	Draw. 26, El. Des. & Kin. ..... ⅔	(0,2)
C. E. 23a, Surveying Field and Office Work ..... ⅔	(0,2)	Eng. 22, Lit. & Adv. Comp. 2	(2,0)
Draw. 25, Mechanical ..... ⅔	(0,2)	*Math. 26, Industrial Math. 3	(3,0)
Eng. 21, Lit. & Adv. Comp. 2	(2,0)	M. E. 24, Machine Shop 1	(0,3)
Econ. 23, Economics 2	(2,0)	M. S. 22, Military Science 1⅔	(1,2)
*Math. 25, Industrial Math. 3	(3,0)	Physics 12 & 16 ..... 3⅔	(3,2)
M. E. 22, Mat. of Engr. 2	(2,0)	Voc. Ed. 22, Intro. Voc. Ed. 1	(1,0)
M. E. 23, Machine Shop 1	(0,3)	Voc. Ed. 28, Obs. of Voc. Ind. Teaching 1	(0,3)
M. S. 21, Military Science 1⅔	(1,2)	Electives 3⅓	
Physics 11 & 15, General 3⅔	(3,2)		
	17⅔		17⅓

Summer industrial employment minimum of four weeks.

Junior Year

Eng. 31, Public Speak. 2	(2,0)	Eng. 32, Business Law 2	(2,0)
M. S. 31, Military Science ..... ⅔	(0,2)	M. E. 30, Welding 2	(1,3)
Voc. Ed. 31.6, Ind. Arts 2⅔	(2,2)	M. S. 32, Military Science ..... ⅔	(0,2)
Voc. Ed. 33.5 Art Metal Work 2	(1,3)	Voc. Ed. 32, Org. of Courses of Study 3	(3,0)
Voc. Ed. 35, Psychol. for Teachers 3	(2,2)	Voc. Ed. 32.6, Ind. Arts 2⅔	(2,2)
Voc. Ed. 39, Prin. of Sec. Ed. 3	(3,0)	Voc. Ed. 38, Teaching of Drawing 3	(2,2)
Voc. Ed. 61, Ind. Lab. 2	(0,6)	Voc. Ed. 62, Ind. Lab. 2	(0,6)
Electives 2		Electives 2⅔	
	17⅓		18

*For education students only.

Senior Year

Arch 35, Bldg. Constr.	3	(3,0)	
Arch. 41.5, Art Appreciation	2	(2,0)	
E. E. 35, Elec. Mach.	2	(2,0)	
E. E. 35a, Elec. Lab.	2/3	(0,2)	
M. S. 41, Military Science	2/3	(0,2)	
*Sociol. 31, Sociology	2	(2,0)	
Voc. Ed. 55, Coordination Meth. in Voc. Ed.	2	(1,3)	
Electives	3 2/3		
	16		

Arch. 36, Bldg. Constr.	2	(2,0)	
Arch 42.5, Ind. Arts Design	2/3	(0,2)	
E. E. 38, Voc. Electricity	1 2/3	(1,2)	
M S 42, Military Science	2/3	(0,2)	
*Voc. Ed. 43, Pract. Teach.	5	(0,10)	
Voc. Ed. 46, Tech. of Teach.	3	(3,0)	
Electives	3		
	16		

*Offered both semesters.

TEXTILE INDUSTRIAL EDUCATION

This course has for its purpose the preparation of young men for positions of usefulness and responsibility in vocational departments of schools located in textile communities. The course includes instruction in the fundamental principles of education, engineering and the textile industry.

The prime purpose of the course is to prepare the students for positions as teachers of trade and industrial subjects and as principals of schools in mill communities as well as local supervisors of industrial education. Since the textile industry is the chief one in the state, this industry is given special prominence. The course is essentially a combination of instruction in the textile industry and the training of industrial teachers.

One hundred forty semester hours of credit are required for graduation. Twelve semester hours of free electives are allowed.

TEXTILE INDUSTRIAL EDUCATION

Freshman Year

First Semester			*Second Semester*		
Gen. Chem. 11, General	3⅔	(3,2)	Gen. Chem. 12, General	3⅔	(3,2)
Drawing 13, Engineering	1⅓	(0,4)	Drawing 14, Engineering	1⅓	(0,4)
Eng. 15, Comp. & Lit.	3	(3,0)	Eng. 16, Comp. & Lit.	3	(3,0)
Hist. 14, Am. Ec. Hist.	2	(2,0)	Gov. 12, Am. Nat'l. Gov't.	2	(2,0)
Math. 15, College Algebra	3	(3,0)	Math. 11, Trigonometry	3	(3,0)
M. E. 17, or 12, Shop	2	(0,6)	M. E. 17, or 12, Shop	2	(0,6)
M. S. 11, Military Science	1⅔	(1,2)	M. S. 12, Military Science	1⅔	(1,2)
Voc. Ed. 11, Orientation	1	(1,0)	W. D. 12, Gen. Textiles	1⅔	(1,2)
Y. M. 11, Gen. Textiles	1⅔	(1,2)			
	19⅓			18⅓	

Summer industrial employment minimum of four weeks.

Sophomore Year

Drawing 25, Mechanical	⅔	(0,2)	Drawing 26, El. Des. & Kin.	⅔	(0,2)
Eng. 21, Lit. & Adv. Comp.	2	(2,0)	Eng. 22, Lit. & Adv. Comp.	2	(2,0)
*Math. 25, Industrial Math.	3	(3,0)	M. S. 22, Military Science	1⅔	(1,2)
M. E. 23, Machine Shop	1	(0,3)	Physics 12 and 16, General	3⅔	(3,2)
M. S. 21, Military Science	1⅔	(1,2)	Voc. Ed. 22, Intro. to Voc. Ed.	1	(1,0)
Physics 11 and 15, General	3⅔	(3,2)	Voc. Ed. 28, Observ. of Teaching	1	(0,3)
W. D. 21, Elem. Design	2	(2,0)	W. D. 22, Adv. Design	2	(2,0)
W. D. 23, Weaving	⅔	(0,2)	W. D. 24, Weaving	⅔	(0,2)
Y. M. 21, Pickers	2⅔	(2,2)	**W. D. 26, Mill Problems	2	(2,0)
**Y. M. 23, Mill Problems	2	(2,0)	Y. M. 22, Cards & Draw F.	2⅔	(2,2)
	19⅓			17⅓	

Summer industrial employment minimum of four weeks.

Junior Year

Sociol. 31, Sociology	2	(2,0)	Eng. 32, Business Law	2	(2,0)
M. S. 31, Military Science	⅔	(0,2)	M. E. 34, Mech. Engr.	3	(3,0)
Voc. Ed. 39, Prin. of Sec. Ed.	3	(3,0)	M. E. 34a, Mech. Engr. Lab.	⅔	(0,2)
W. D. 31, Dobby Design	2	(2,0)	M. S. 32, Military Science	⅔	(0,2)
W. D 33, Fab. Analysis	1	(0,2)	Voc. Ed. 32, Org. of Courses of Study	3	(3,0)
W. D. 35, Fancy Loom Fixing	⅔	(0,2)	W. D. 34, Fab. Analysis	1	(0,2)
Y. M. 31, Rov. Frames	2⅔	(2,2)	W. D. 36, Fancy Loom Fixing	⅔	(0,2)
Y. M. 34, Spinning	3	(2,3)	**Y. M. 28, Cotton Grading	⅔	(0,2)
Electives	2		*Y. M. 42, Combers	1⅔	(1,2)
	17		Electives	3⅓	
				16⅔	

Senior Year

Econ. 23, Economics	2	(2,0)	M. S. 42, Military Science	⅔	(0,2)
E. E. 35, Elec. Mach.	2	(2,0)	**Voc. Ed. 43, Prac. Teach.	5	(0,10)
E. E. 35a, Elec. Lab.	⅔	(0,2)	Voc. Ed. 46, Tech. of Teach.	3	(3,0)
Eng. 31, Public Speaking	2	(2,0)	W. D. 44, Warp Prep.	2	(2,0)
M. S. 41, Military Science	⅔	(0,2)	W. D. 48, Knitting	⅔	(0,2)
T. M. 41, Textile Costing	1⅔	(1,2)	T. M. 42, Textile Costing	2⅔	(2,2)
T. M. 44, Textile Management	2	(2,0)	Electives	2	
Electives	5			16	
	16		Suggested Electives:		
Suggested Electives:			Econ. 24, Economics	2	(2,0)
Voc. Ed. 31.6 Ind. Arts	2⅔	(2,2)	Voc. Ed. 32.6 Ind. Arts	2⅔	(2,2)
Voc. Ed. 61, Ind. Lab.	2	(0,6)	Voc. Ed. 62, Ind. Lab.	2	(0,6)

*For education students only.
**Offered both semesters.

DESCRIPTION OF COURSES*

AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY

MR. AULL

MR. MILLS MR. FERRIER MR. PETERSON MR. JENKINS MR. BING

AG. EC. 22—ELEMENTARY AGRICULTURAL ECONOMICS—Semester 1 or 2 (3 and 0) 3 cr.

Purpose: To acquaint the student with the fundamental principles of economics in relation to agriculture and to encourage a better appreciation of the place of agriculture in modern economic systems. Besides affording an adequate background for further work in agricultural economics, this course is designed to prepare the student for more intelligent participation in the affairs of any environment in which agriculture is important. *Principal Topics*: Economic theory and terminology with application to agriculture, government policy and agriculture, interrelations of agriculture and other branches of industry, and the basic economic problems affecting the farm business and the farm way of life. (*Economics with Applications to Agriculture*—Dummeier and Heflebower.)

MR. BING

AG. EC. 31—STATISTICAL METHODS—Semester 1 (3 and 0) 3 cr.

Prerequisite: Ag. Ec. 22.

Purpose: A course in the meaning and application of statistical methods which will train students to make ordinary statistical studies. *Principal Topics*: Sampling, tabular and graphic presentation, averages, ratios and coefficients, dispersion, the theory of probability and error, index numbers, trends, and correlation.

MR. JENKINS

AG. EC. 32—FARM MANAGEMENT—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Ag. Ec. 22.

Purpose: To study the principles of farm organization and management from the point of view of efficiency and continuous profit. *Principal Topics*: Factors affecting types of farming; measures of profit; factors affecting profits (prices, size of business, rates of production, labor efficiency, combination of enterprises, farm layout, efficiency in use of equipment, markets and marketing); agricultural credit; insurance and investments. No text is required.

MR. PETERSON

*Below, and on the pages following, are given in alphabetical order the descriptions of courses, including the subject, catalog number, descriptive title, the purpose, and the principal topics of each course. In general, Freshman courses are numbered from 11 through 19; Sophomore, 20 through 29; Junior, 30 through 39; and Senior, 40 through 60.

Ag. Ec. 33—Cooperation in Agriculture—Semester 1 (3 and 0) 3 cr.

Purpose: To acquaint the student with the principles, techniques and methods of the cooperative business method and its applications to producing, purchasing, marketing, servicing, and financing in agriculture.

Mr. Aull

Ag. Ec. 34—Public Finance—Semester 2 (3 and 0) 3 cr.

Prerequisite: Ag. Ec. 22.

Purpose: To familiarize the student with the problems of taxation and their economic and social implications with particular reference to agriculture. *Principle Topics*: The essentials of a just and equitable tax; a critical examination of some of the more common revenue-raising measures; budgets, and public expenditures, etc. The student will be given opportunity to study in detail the relative burden of state and local taxes upon different groups of individuals. (*Public Finance*—Lutz.)

Mr. Aull

Ag. Ec. 40—Economic Geography—Semester 2 (3 and 0) 3 cr.

Purpose: To familiarize the student of economics with allied social sciences, especially geography—human, social, cultural, and economic. Social and physical factors are observed as determinants of economic and political systems. International trade relations arising from comparative advantages are studied as a cue for future agricultural and industrial developments in the United States. *Principal Topics*: Distribution of the world's population and natural resources, interrelationships of environment and human needs and activities, America's share in the world's industrial and agricultural market, and evaluation of world economic systems, and the prevailing theories of international trade.

Mr. Bing

Ag. Ec. 41—Principles of Marketing—Semester 1 (3 and 0) 3 cr.

Prerequisite: Ag. Ec. 22.

Purpose: To study problems encountered by farmers in marketing their products. *Principal Topics*: A course dealing with the principles of marketing, cooperative marketing, marketing services, marketing mechanisms, market grades, and standardization; storage, warehousing,

transportation, future trading, inspection and grading of perishable and staple products with particular reference to problems encountered in marketing South Carolina farm products.(*Marketing*—C. F. Phillips.)

Mr. Ferrier

Ag. Ec. 43—Farm Finance and Accounting—Semester 1 (3 and 0) 3 cr.

Prerequisite: Ag. Ec. 22, 32.

Purpose: (a) To review the field of money and banking with special reference to agencies developed to meet the credit needs of agriculture; (b) to study the facilities, principles and practices underlying an efficient use of agricultural credit; and (c) to become familiar with the principles involved in keeping farm records and in preparing and analyzing financial statements. *Principal Topics*: A study of money, banking and the financial institutions serving agriculture; analysis of the credit needs of farmers; principles underlying an efficient use of agricultural credit; farm appraisal, farm record keeping, and the analysis of financial data pertaining to farms and to institutions serving agriculture. (Text to be selected.)

Mr. Ferrier

Ag. Ec 44—Land Economics—Semester 2 (3 and 0) 3 cr.

Prerequisite: Senior Standing.

Purpose: To study land as a resource, as a factor in production, and its relation to society. *Principal Topics*: A critical treatment of such subjects as land settlement and colonization, land booms and depressions, land policies, land valuation and assessment, land price movements and rents. Economic land holding and economic land utilization are studied from individual, state, and national viewpoints. Particular attention is given to state and national land use planning programs, rural zoning, and conservation. (*Land Economics*—Ely and Wehrwein.)

Mr. Aull

Ag. Ec. 45—Rural Sociology—Semester 2 (3 and 0) 3 cr.

Prerequisite: Ag. Ec. 22.

Purpose: To study rural society and the place of rural people in national life. *Principal Topics*: The structure of the rural community and its social institutions, particularly the family, church, school and government; rural health and welfare problems; rural attitudes; population

problems, especially those associated with migration and rural-urban relationships; the agricultural village and its relation to the farmer.

Mr. Jenkins

Ag. Ec. 46—Farmers' Movements—Semester 2 (3 and 0) 3 cr.

Purpose: To give the student a view of the efforts of farmers to organize for the improvement of agriculture and other rural concerns. *Principal Topics*: Beginning with the first local agricultural society, the development of this movement is followed through the period of the Civil War. After 1865, the Grange, Farmers' Alliance, etc., are studied in their chronological order.

Mr. Mills

Ag. Ec. 51, 52—Research Seminar—Semesters 1 and 2 (1 and 0) 1 cr. each semester.

Prerequisite: Senior standing and major in agricultural economics and rural sociology.

Purpose: To examine the methodology of outstanding researches in the fields of agricultural economics and rural sociology; to acquaint the student with various source materials and their uses; and to apply these techniques to specific problems. *Principal Topics*: Principles and procedures in planning and conducting research; statistical methods; and the relation of economic and sociological principles to present day problems.

Mr. Aull and Staff

AGRICULTURAL ENGINEERING

Mr. Nutt

Mr. McAdams Mr. Dunkelberg

Ag. Engr. 21—Ag. Mechanics—Semester 1 (2 and 3) 3 cr.

Purpose: To give the theoretical and practical application of the mechanics pertaining to agriculture. *Principal Topics*: Soldering, cement work, rope work, belts, pulleys and laces, leather work, pipe fitting, painting, wood finishing, and glazing. (*Mechanical Training*—Boss, Dent, and White.)

Mr. McAdams

Ag. Engr. 22—Farm Machinery—Semester 2 (2 and 2) 2 2/3 cr.

Purpose: To give theoretical and practical training in the operation of modern farm equipment. *Principal Topics*: Construction, operation, requirements and utilization of tillage, seeding, cultivating, harvesting and belt-operated farm machinery. (*Farm Machinery and Equipment*—Smith.)

Mr. Nutt Mr. McAdams

Ag. Engr. 33—Farm Buildings—Semester 1 (2 and 3) 3 cr.

Prerequisite: Drawing 25 and 26.

Purpose: To assist students in the design and construction of farm buildings. *Principal Topics*: Properties of farm building materials, principles of concrete construction, essentials and design of typical structures, wood preservatives, specification, cost estimating, and farmstead sanitation. (*Farm Buildings*—Scoates.)

Mr. Dunkelberg

Ag. Engr. 34—Advanced Farm Buildings—Semester 2 (2 and 3) 3 cr.

Prerequisite: Ag. Engr. 33.

Purpose: A continuation of Agricultural Engineering 45. *Principal Topics*: A more detailed study of construction, design, and cost estimation of farm buildings. (*Farm Buildings*—Scoates.)

Mr. Dunkelberg

Ag. Engr. 35—Motors and Power Machinery—Semester 1 (2 and 3) 3 cr.

Prerequisite: Physics 21 and 22.

Purpose: To give to the student theories of operation, construction, and utilization of internal combustion engines. *Principal Topics*: History of the internal combustion engine, nomenclature and definitions, principles of operation, power and its measurement, and gas engine troubles. (*Farm Gas Engines and Tractors*—Jones.)

Mr. Nutt

Ag. Engr. 38—Soil Conservation—Semester 2 (1 and 3) 2 cr.

Purpose: To provide a less technical course in terracing and drainage for students majoring in Agricultural Education and those majoring

in any field of agriculture other than Agricultural Engineering. *Principal Topics*: Elementary surveying, prevention of soil erosion, with equal emphasis on terracing, design, and study of drainage systems. (*Soil Conservation*—Ayers.)

Mr. Nutt Mr. McAdams

Ag. Engr. 41—Rural Electrification—Semester 1 (2 and 3) 3 cr.

Prerequisite: EE. 35 and E. E. 35a.

Purpose: To acquaint students in the problems of distribution and utilization of electricity into rural areas. Emphasis is placed on rural line construction, house wiring, and proper adaptation of electrical equipment to the farm.

Mr. McAdams

Ag. Engr. 44—Surveyage and Drainage—Semester 2 (2 and 3) 3 cr.

Purpose: To fulfill the need of instruction dealing with drainage, terracing, reclamation, and surveying problems pertaining to farms. *Principal Topics*: Elementary surveying, design and study of drainage systems, prevention of soil erosion, with special emphasis on terracing, land reclamation, and the use of explosives. (*Land Drainage and Reclamation*—Ayers and Scoates.)

Mr. Nutt

Ag. Engr. 48—Advanced Farm Machinery Laboratory—Semester 2 (1 and 3) 2 cr.

Prerequisite: Ag. Engr. 22.

Purpose: To provide advanced theoretical and practical training for students in the School of Agriculture whose major is Agricultural Engineering. *Principal Topics*: Testing and adjusting of tractors, seeding, cultivating, harvesting and belt-operated farm equipment.

Mr. Nutt

Ag. Engr. 51 & 52—Introduction to Research and Thesis—Semesters 1 and 2 (0 and 2) 2/3 cr.

Purpose: To teach the student how to attack and solve a research problem. *Principal Topics*: A suitable problem is assigned each student. The results of the study are presented in thesis form.

Agricultural Engineering Staff

AGRONOMY

Mr. Cooper

Mr. Collings Mr. Patrick Mr. Lipscomb Mr. Jones

Agr. 11—Field Crops—Semester 1 (3 and 0) 3 cr.

Purpose: To give the student a fundamental course in general field crops. *Principal Topics*: Origin, history, botanical characteristics, physiology, ecology, varieties, breeding, soil adaptation, fertilizer requirements of the most important crops of the United States and the cultural methods employed in their production. (*Production of Field Crops*—Huchinson, Wolfe and Kipps.)

Mr. Collings Mr. Lipscomb

Agr. 20—Soils—Semester 2 (2 and 2) 2 2/3 cr.

Purpose: To give the student a fundamental course in soils. *Principal Topics*: Basic principles of soil physics, soil fertility, soil biology, and soil management. The study deals with the soil as a reservoir for water; a medium for root development, a source of nutrients, and a home of organisms. (*The Nature and Properties of Soils*—Lyon and Buckman.)

Mr. Collings Mr. Jones Mr. Lipscomb

Agr. 31—Fertilizers and Manures—Semester 1 (2 and 0) 2 cr.

Prerequisite: Agr. 20.

Purpose: To give the student a thorough knowledge of the sources, characteristics, and uses of fertilizers and manures. *Principal Topics*: Sources, mining and manufacturing, composition, physical characteristics, and use of fertilizers and manures. (*Commercial Fertilizers—Their Sources and Use*—Collings.)

Mr. Collings

Agr. 32—Genetics—Semester 2 (2 and 2) 2 2/3 cr.

Purpose: To instruct students in the basic principles of genetics. *Principal Topics*: Heredity and variation, laws of heredity, application of genetic principles of plant and animal improvement. (*Principles of Genetics*—Sinnott and Dunn.)

Mr. Lipscomb Mr. Jones

AGR. 33—FORAGE CROPS—Semester 1 (3 and 0) 3 cr.

Prerequisite: Agr. 11.

Purpose: To give the student a thorough knowledge of the botanical characteristics, cultural practices employed, and utilization of the leading forage plants of the United States. *Principal Topics*: The origin and adaptation of forage crops, methods of production; treatment of pastures, meadows, etc., and an intensive study of the leading forage plants with special emphasis given to those adapted to South Carolina conditions. (*Forage Plants and Their Culture*—Piper; *Growing Pastures in the South*—Combs.)

MR. JONES

AGR. 42—SOIL FERTILITY AND MANAGEMENT—Semester 2 (2 and 0) 2 cr.

Prerequisite: Agr. 20 and Agr. 31.

Purpose: A detailed study of soil composition and practices of soil management. *Principal Topics*: Composition of the soil, influence of crop rotations and fertilizers on soil productivity, influence of various methods of tillage on crop yields, and a general study of those factors essential for the practical utilization of South Carolina soils. (*Soil Management*—Bear; *Soils and Men*—U. S. D. A. Yearbook, 1938.)

MR. COLLINGS

AGR. 43—FARM PROBLEMS—Semester 1 (2 and 0) 2 cr.

Purpose: To familiarize the student with the practical problems confronted under various conditions that exist in different sections of South Carolina. *Principal Topics*: The problems to be taken from experiences of farmers, county agents, and specialists in adjusting farm practices to varying conditions of organization, soil types, and climate.

MR. PATRICK

AGR. 44—ADVANCED SOIL LABORATORY—Semester 2 (0 and 2) 2/3 cr.

Prerequisite: Agr. 20.

Purpose: To develop laboratory technique and to make students proficient in making physical and chemical determinations of soils. *Principal Topics*: Mechanical analysis, determinations of volume weight, soil water, organic matter, nitrogen, phosphoric acid, and potash. (*Soil Characteristics*—Emerson.)

MR. COLLINGS

AGR. 45—CROP NUTRITION—Semester 1 (2 and 0) 2 cr.

Prerequisite: Agr. 11.

Purpose: To give the student a comprehensive knowledge of the geographical distribution, soil and fertilizer requirements of important farm crops. *Principal Topics*: Economic importance and climatic requirements of various crops; important soil factors influencing crop production, and the nutrient requirements of crops. (*The Small Grains*—Carlton; and *The Corn Crop*—Montgomery.)

MR. COOPER

AGR. 47—ADVANCED CROP LABORATORY—Semester 1 (0 and 2) 2/3 cr.

Purpose: To give advanced students detailed information on important agronomic problems. *Principal Topics*: Experimental methods used in agronomy, morphological characters, classification, and yielding capacity of important varieties of various farm crops. (*Bulletins and Periodicals.*)

MR. LIPSCOMB

AGR. 49—PLANT BREEDING—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Agr. 32.

Purpose: To present the application of the basic principles of genetics in the improvement of crop plants. *Principal Topics*: Biometrical methods, field plant technique, modes of reproduction of plants and methods of improving various crop plants. (*Breeding Crop Plants*—Hayes and Garber.)

MR. LIPSCOMB MR. JONES

AGR. 51—SEMINAR—Semester 1 (1 and 0) 1 cr.

Purpose: To consider agronomic topics of special interest in crop production. *Principal Topics*: Material occurring in current numbers of professional journals and bulletins.

MR. COOPER

AGR. 52—SEMINAR—Semester 2 (1 and 0) 1 cr.

Purpose: To give the student the latest published and unpublished information concerning recent developments in the field of soil science. *Principal Topics*: Topics taken from latest published bulletins, reports, and professional magazines.

MR. COLLINGS

AGR. 53—COTTON—Semester 1 (2 and 0) 2 cr.

Prerequisite: Agr. 11.

Purpose: To give the student a thorough knowledge of all phases of cotton production. *Principal Topics*: History, morphology, physiology, varieties, methods of cultivation, fertilization, insect and disease control, breeding, harvesting and grading of American Upland cotton. (*Cotton Fiber Production in America*—Collings.)

MR. COLLINGS

AGR. 61, 62—INTRODUCTION TO RESEARCH AND THESIS—Semesters 1 and 2 (0 and 3) 1 cr.

Purpose: To teach the student how to attack and solve a research problem. *Principal Topics*: A suitable problem is assigned each student. The results of the study are presented in thesis form.

MR. COLLINGS

ANIMAL HUSBANDRY

MR. STARKEY

MR. RITCHIE MR. HAUSER MR. LEASE

A. H. 12—TYPES, BREEDS AND MARKET CLASSES OF LIVESTOCK—Semesters 1 and 2 (2 and 2) 2 2/3 cr.

Purpose: To give the agricultural students a knowledge of the characteristics and uses of farm animals. *Principal Topics*: Types, breeds, and market classes of beef cattle, horses, mules, sheep, and swine. In laboratory, the judging of farm animals is given considerable emphasis. (*Types and Market Classes of Livestock*—Vaughan.)

MR. RITCHIE MR. HAUSER

A. H. 31—FEEDS AND FEEDING—Semester 1 (3 and 0) 3 cr.

Prerequisite: A. H. 12 and Chemistry 21.

Purpose: To give the student an understanding of the principles of feeding farm animals. *Principal Topics*: A study of nutrients, digestion, metabolism of feed stuffs, nutritive ratios, feeding standards, and the balancing of rations. (*Feeds and Feeding*—Henry and Morrison.)

MR. HAUSER

A. H. 32—Judging—Semester 2 (0 and 3) 1 cr.

Prerequisite: A. H. 12.

Purpose: To train students in the art of judging the different classes of livestock. *Principal Topics*: A study of breed types and the selection of foundation animals for purebred herds.

Mr. Hauser

A. H. 34—Pork Production—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: A. H. 31.

Purpose: To give the students a thorough knowledge of the fundamentals of pork production. *Principal Topics*: Feeding and management of hogs at different weights and ages. Forage crops, protein supplements, preparation of feeds, methods of feeding, relative value of feeds, summer and winter management, buying, and selling. (*Pork Production*—Smith.)

Mr. Starkey Mr. Hauser

A. H. 35—Farm Meats—Semester 1 (0 and 6) 2 cr.

Prerequisite: A. H. 12.

Purpose: The proper selection and killing of meat animals and the cutting and curing of farm meats. *Principal Topics*: Production, selection, slaughtering, cutting, curing, judging, and consumption of farm meats. (*Meat and Meat Products*—Tomhave.)

Mr. Ritchie

A. H. 40—Animal Breeding—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Dairy 32 or Agronomy 32.

Purpose: To give the student an understanding of the fundamental principles relative to the breeding and improvement of livestock. *Principal Topics*: Variation, heredity, selection, linebreeding, in-breeding, cross-breeding, breed analysis, and other correlated subjects. (*Breeding and Improvement of Farm Animals*—Rice.)

Mr. Starkey

A. H. 41—Advanced Feeds and Feeding—Semester 1 (2 and 0) 2 cr.

Prerequisite: A. H. 31.

Purpose: To give the student a knowledge of the relative values of the different feeds used in livestock production, to study the nutrient requirements of the different classes of livestock, to become familiar with the digestible nutrients in our most common feeds, and to balance rations for all classes of livestock. (*Feeds and Feeding*—Henry and Morrison.)

Mr. Starkey

A. H. 42—Horse and Sheep Production—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: A. H. 31.

Purpose: To give the students training relative to the feeding and management of horses and sheep. *Principal Topics*: Feeding, breeding, management, judging, shearing, blocking, and sanitation. (*Productive Sheep Husbandry*—Coffey.)

Mr. Hauser

A. H. 43—Beef Production—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: A. H. 31.

Purpose: To familiarize the student with the principles of breeding, feeding, and management of beef cattle in the United States and foreign countries. *Principal Topics*: Early history of beef production, beef production in foreign countries, relation of beef production to general farming, most profitable feeds for beef production, methods of breeding to improve beef cattle, management of the purebred herd. (*Beef Production* —Snapp.)

Mr. Starkey

A. H. 44—Advanced Meats—Semester 2 (1 and 3) 2 cr.

Prerequisite: A. H. 35.

Purpose: This course deals with retail cutting of meat, the making of sausage, and meat specialities, and meat hygiene.

Mr. Ritchie

A. H. 45—Advanced Judging—Semester 1 (0 and 3) 1 cr.

Prerequisite: A. H. 12.

Purpose: To give advanced students an opportunity to become more proficient in judging livestock. *Principal Topics*: Judging cattle, horses, mules, sheep and swine. Classes of livestock are studied and placed, and reasons given for the placings.

Mr. Hauser

A. H. 47—Advanced Animal Nutrition—Semester 1 (2 and 0) 2 cr.

Prerequisite: A. H. 31 and Organic Chemistry.

Purpose: This course is designed to cover the most recent advances in the field of animal nutrition, including a consideration of the human requirements, the latter of which should be of interest to pre-medical students. *Principal Topics*: Vitamins, minerals, fatty acids, amino acids, enzymes, etc. (*Chemistry of Food and Nutrition*—Sherman.)

Mr. Lease

A. H. 52—Seminar—Semester 2 (2 and 0) 2 cr.

Prerequisite: A. H. 31.

Purpose: To teach the student how to make use of the library and to keep informed concerning the latest findings of the experiment stations. *Principal Topics*: Timely topics are selected which have a bearing on the work which is being conducted at the various experiment stations. Each student summarizes the data on his particular problem and presents it to the group taking the course.

Mr. Starkey

ARCHITECTURE

Mr. Lee

Mr. Anderson Mr. Hoffman Mr. Hodge Mr. Parrot

Arch. 11, 12—Elements of Architecture—Semesters 1 and 2 (0 and 5) 1 2/3 cr.

Purpose: To give the beginner in Architecture an accurate picture of the profession he has elected, and basic training in drafting and design. *Principal Topics*: Exercises in proper drafting methods. An understanding of the use of the orders in architecture. Elementary study of the construction drawings of a small building. Elements. Training in presentation of work. Brief lectures on the duties of an architect.

Mr. Hoffman Mr. Parrott

Arch. 13, 14—Freehand Drawing—Semesters 1 and 2 (0 and 4) 1 1/3 cr.

Purpose: To give the student a thorough working knowledge of the principles of both angular and parallel perspective—the perspective of circles and shading. *Principal Topics*: Study of mass, form, proportion, and value with the mediums of pencil and charcoal. A sketching technique is stressed.

Mr. Hodge

Arch. 15—Descriptive Geometry—Semester 1 (0 and 2) 2/3 cr.

Purpose: To develop the powers of visualization and imagination. *Principal Topics*: Points, lines, planes, intersections, and sections. Solutions on drafting board. (*Practical Descriptive Geometry*—D. A. Low.)

Mr. Hoffman Mr. Parrott

Arch. 16—Shades and Shadows and Perspective—Semester 2 (0 and 2) 2/3 cr.

Prerequisite: Architecture 15.

Purpose: To create in the student's mind correct form and proportion by application of conventional shades, shadows, and principles of perspective. *Principal Topics*: Drafting board practice in casting of

Shades and Shadows on architectural forms and principles of architectural perspective. (*Shades and Shadows for Architects*—Buck, Ronan and Oman.)

Mr. Hoffman Mr. Parrott

Arch. 21—Architectural Design—Semester 1 (0 and 14) 4 2/3 cr.

Prerequisite: Arch. 12, 14, 15, 16.

Purpose: To introduce the student by means of analytical problems to the basic principles of design inherent in the smaller elements of architecture. *Principal Topics*: Proportions, relative values of three dimensional mass; relation of lesser elements and decorative details to the larger forms, in respect to mass and pattern; design of windows, doors, porticoes, arches; the Orders, together with analysis of detail of mouldings, carried out in rendered problems of from two to five weeks duration. Rendering: building out of masses, focus of attention.

Mr. Anderson Mr. Parrott

Arch. 22—Architectural Design—Semester 2 (0 and 14) 4 2/3 cr.

Prerequisite: Arch. 21.

Purpose: Continuation of Arch. 21, with a gradual working toward small problems in planning in preparation for Arch. 31. *Principal Topics*: Continuation of Arch. 21; planning as a problem in three dimensional space; elementary exercises in spatial requirements of windows, doors, stairs, roofs, bath rooms, closets, fireplaces, etc., carried out in rendered problems of from two to five weeks duration.

Mr. Anderson Mr. Parrott

Arch. 23, 24—Antique and Color—Semester 1 and 2 (0 and 3) 1 cr.

Prerequisite: Arch 14.

Purpose: To give a thorough drill in the drawing of simple casts of architectural fragments, parts of the figure, and still life groups. *Principal Topics*: Elements of decorative composition, still life groups in monochrome and color. Outdoor sketching—sketching in water-color, pastel, and charcoal.

Mr. Hodge

Arch. 23.5, 24.5—Decorative Design and Color—Semesters 1 and 2 (0 and 3) 1 cr.

Prerequisite: Arch 14.

Purpose: To give the student majoring in Weaving and Designing the fundamentals of form, shade, and color underlying the design of decorative textiles. *Principal Topics*: Pencil sketching, charcoal drawing

from models, casts and nature, adaptation of natural and conventional forms to decorative design as applied to textile fabrics, study of color in theory and practice, and water-color renderings.

MR. HODGE

ARCH. 25—HISTORY OF ARCHITECTURE—Semester 1 (4 and 0) 4 cr.

Purpose: To acquaint the student with the development of architecture, from prehistoric to mediaeval time, as a problem both of construction and aesthetics. *Principal Topics*: Influence of various geographic, geological, social, and psychological factors; structural problems and their solution, post and lintel, arch, vault, pendentive, dome; planning problems and their solution; temples, churches, public buildings; decorative problems and their solution, as revealed in the buildings of the Egyptain, Greek, Roman, Early Christian, Byzantine, and Romanesque periods.

MR. ANDERSON

ARCH. 25.5—ARCHITECTURE OF ANTIQUE AND EARLY CHRISTIAN CIVILIZATIONS—Semester 1 (2 and 0) 2 cr.

Purpose: An elective course to present, as cultural background, a brief, non-technical synopsis of architecture as it developed in the earlier civilizations of Western Europe. *Principal Topics*: While in general this course covers the material of Arch. 25, the lectures will be less concentrated and will be given from the lay rather than the architectural point of view. Emphasis will be placed not on specific buildings, but on types of buildings evolved by the different civilizations. Architecture in the Egyptian, Greek, Roman, and Early Christian civilizations.

MR. ANDERSON

ARCH. 26—HISTORY OF ARCHITECTURE—Semester 2 (4 and 0) 4 cr.

Prerequisite: Arch. 25.

Purpose: To acquaint the student with the development of architecture, from mediaeval to modern time, as a problem both of construction and aesthetics. *Principal Topics*: Influence of various geographic, geological, social, and psychological factors; the spread of the Romanesque system of building through Western Europe, and its crystallization in Gothic architecture; the revival of Classic form in Italy during the Renaissance; the spread of the Renaissance into France and England; nineteenth century eclecticism, and the beginnings of modern architecture.

MR. ANDERSON

ARCH. 26.5—ARCHITECTURE OF MEDIAEVAL AND RENAISSANCE CIVILIZATIONS—Semester 2 (2 and 0) 2 cr.

Purpose: An elective course to present, as cultural background, a brief, non-technical synopsis of architecture as it developed in the later civilizations of Western Europe. *Principal Topics*: Architecture of the mediaeval and renaissance civilizations of Italy, France, and England. No prerequisite is required, but inasmuch as the forms of both mediaeval and renaissance architecture are either wholly or in part rooted in earlier developments, the first half-dozen lectures will be devoted to these before proceeding with the material of the course.

MR. ANDERSON

ARCH. 28—SUMMER WORK—6 Weeks.

Purpose: To give the student an insight into the practical side of the profession, a better appreciation of the objectives in his college work and to enable him to secure better employment upon graduation. *Principal Topics*: Any duties connected with an architect's office or on construction work with a contractor, or making measured drawings of some building of good architectural character approved by the faculty of architecture. The student is expected to do this without remuneration if necessary.

ARCH. 31, 32—ARCHITECTURAL DESIGN—Semesters 1 and 2 (0 and 22) 7 1/3 cr.

Prerequisite: Arch. 22.

Purpose: To acquaint the student with problems involving planning, elevation, and mass composition in all styles of architecture. *Principal Topics*: The formal plan problem of public buildings; studies in entourage, elements of landscape architecture with relation to plan and elevation, interior architecture, indication, and presentation. The esquisse-esquisse.

MR. ANDERSON MR. HOFFMAN MR. PARROTT

ARCH. 31a—THEORY OF ARCHITECTURE—Semester 1—(Given jointly as part of Arch. 31.)

Prerequisite: Registration in Architecture 31.

Purpose: An open period where all topics relating to architecture are brought up for discussion. Seminar. *Principal Topics*: Formal discussion of the theory of design; axial relationship, mosaic, circulation, requirements of type buildings; informal discussion of new theories of design and style; competitions and exhibitions.

MR. HOFFMAN

ARCH. 33, 34—CAST DRAWING—Semesters 1 and 2 (0 and 3) 1 cr.

Prerequisite: Arch. 24.

Purpose: An advanced course in the representation of antique sculpture to show the elements of anatomy and its relation to form. *Principal Topics*: Drawing from casts with a choice of mediums such as charcoal, conte, pastel, etc.; outdoor sketching in pencil and water-color.

MR. HODGE

ARCH. 33.5—DECORATIVE DESIGN AND COMPOSITION—Semester 1 (0 and 3) 1 cr.

Prerequisite: Arch. 24.5.

Purpose: To give the student majoring in Weaving and Designing advanced training in the composition of textile patterns. *Principal Topics*: Composition of border patterns; geometric bases for all-over repeating designs; designing for damasks, brocades, tapestries, rugs, etc.

MR. HODGE

ARCH. 35, 36—BUILDING CONSTRUCTION—Semester 1 (3 and 0) 3 cr. Semester 2 (2 and 0) 2 cr.

Purpose: To give the student a knowledge of the materials used in the construction of frame and masonry buildings, their qualities and uses. *Principal Topics*: Growth of wood, house framing, roofing, door and window details, flooring, plastering, interior and exterior finish, painting, masonry, chimney construction, hardware, problems in calculation. (*Materials and Methods of Architectural Construction*—Gay and Parker.)

MR. LEE

ARCH. 37, 38—WORKING DRAWINGS—Semesters 1 and 2 (0 and 2) 2/3 cr.

Prerequisite: Architecture 22, Registration in Arch. 35, 36.

Purpose: The student is required to make complete working drawings of a frame building just as the practicing architect does in his office. *Principal Topics*: Scale drawings of plan of each floor, foundation and roof; elevation of each side of building; large scale details of framing, doors, windows, trim, stairs, cornice, roof and chimney; calculations; tracing, blueprinting.

MR. LEE

ARCH. 39—HISTORIC ORNAMENT—Semester 1 (0 and 2) 2/3 cr.

Prerequisite: Arch. 22, 24, 26.

Purpose: To acquaint the student with the development, from prehistoric to modern time, of architectural ornament. *Principal Topics*: Carved and painted ornament; mosaic pavements; painted wall decoration; stained glass, a decoration of vaults and ceilings; interior decoration; as developed in Egyptian, Greek, Roman, Mediaeval, and Renaissance architecture. After a brief analysis of each phase, the student is required to submit a small rendered plate of the particular ornament under consideration.

MR. ANDERSON

ARCH. 40, 49—LIFE DRAWING—Semester 1 and 2 (0 and 2) 2/3 cr.

Prerequisite: Arch. 34.

Purpose: To acquaint the student with the proportion and anatomy of the nude and draped figure. Designed primarily for achitectural students. *Principal Topics*: Quick sketches of the nude for action and movement. Longer studies of the nude and draped figure for tone values, composition, and light effects. Charcoal as a medium.

MR. HODGE

ARCH. 40.5—HISTORY OF PAINTING—Semester 2 (2 and 0) 2 cr.

Prerequisite: Junior or Senior Standing.

Purpose: Stressing the appreciation of painting through the various national styles. *Principal Topics*: Pre-historic painting; Egyptian and Greek painting; the Renaissance in Italy, the Netherlands, and France; the German, Spanish, English, and American schools; the International style and abstract art; illustrated with slides and mounted reproductions. (*University Prints.*)

MR. HOFFMAN

ARCH. 41, 42—ARCHITECTURAL DESIGN—Semesters 1 and 2 (0 and 20) 6 2/3 cr.

Prerequisite: Arch. 32.

Purpose: To present architectural problems of an advanced nature. *Principal Topics*: The complex plan, multi-storied elevation, elements of

civic planning, advanced archaeology problems, the esquisse-esquisse, advanced landscape architecture.

Mr. Anderson

Arch. 41.5—Art Appreciation—Semester 1 (2 and 0) 2 cr.

(For students in Industrial Education—Elective).

Purpose: To cultivate in the student an artistic taste and to direct and instruct by bringing him in contact with the best examples. *Principal Topics*: Periods and styles of architecture, painting, sculpture, furniture, ornament, decorative and interior composition, given by lectures and lantern slides.

Staff

Arch. 42.5—Industrial Design—Semester 2 (0 and 2) 2/3 cr.

(For students in Industrial Education).

Prerequisite: Drawing 12 and 14, Architecture 41.5.

Purpose: To give the students the fundamentals in design of simple pieces of furniture as worked out on the drafting table. *Principal Topics*: Working detail drawings of chairs, tables, metal work, etc.

Mr. Lee

Arch. 43, 44—Building Construction—Semesters 1 and 2 (3 and 0) 3 cr.

Prerequisite: Arch. 36, Registration in Arch. 45, 46 and 47.

Purpose: To give the student a working knowledge of the nature, quality, and uses of materials in a masonry building. *Principal Topics*: Foundations, mortars, details of masonry construction, steel, concrete, fireproof construction, estimates, specifications, superintendence, calculations.

Mr. Lee

Arch. 45, 46—Structural Design—Semester 1 (0 and 6) 2 cr. Semester 2 (0 and 8) 2 2/3 cr.

Prerequisite: Architecture 36, 38, Registration in Arch. 43, 44 and 47.

Purpose: To train the student to make working drawings of a masonry building with specifications, including mechanical plant, as usually

prepared in the practicing architect's office. *Principal Topics*: Scale drawings of all floor plans and elevations, cross sections; large scale details of all parts of the construction with necessary calculations; specification writing, estimating; completed documents are to be in approved shape so that they may be submitted to a contractor for a bid.

Mr. Lee

Arch. 47—Mechanical Plant—Semester 1 (2 and 0) 2 cr.

Prerequisite: Architecture 38.

Purpose: To familiarize the student with the design and requirements of heating, lighting and sanitary systems in a building. *Principal Topics*: Hot air, hot water, and steam systems of heating; ventilation, electric lighting, plumbing for supply and drainage. Layout of these systems is required on drawings made in Architecture 38 or 45.

Mr. Lee

Arch. 48—Professional Practice—Semester 2 (1 and 0) 1 cr.

(For seniors in Architecture only).

Purpose: To familiarize the student with methods of practice of architecture and inculcate in him the high ethical ideals of the profession. *Principal Topics*: Office management and organization, laws, codes, contracts, ethics, competitions; documents of the American Institute of Architects are studied.

Mr. Lee

Arch. 51, 52—Advanced Architectural Design—Semesters 1 and 2 (credits to be arranged with instructor).

Prerequisite: Arch. 42.

Purpose: A continuation of Arch. 42 with more advanced work, as an elective to advanced students having the prerequisite. *Principal Topics*: The student writes his own program of the project. Scheduled criticism periods and personal presentation to the architectural faculty for judgment at the end of each semester.

Mr. Hoffman

ARCH. 53—MODELING—Semester 1 (0 and 2) 2/3 cr.

Prerequisite: Arch. 12, 14, 15, 16.

Purpose: To give the student studies in three dimensional representation in a plastic medium. *Principal Topics*: Bas-relief placques, the human figure in relief and in the round, decorative compositions in bas-relief and in the round, advanced anatomy of the human figure, and animal forms.

MR. HODGE

BACTERIOLOGY

MR. AULL

BACT. 31—GENERAL BACTERIOLOGY—Semester 1 (2 and 4) 3 1/3 cr.

Prerequisite: Botany 13 and 14, Chemistry 11 and 12. (*Suggested*: Chemistry 21, or Chemistry 25 and 26.)

Purpose: To give the student a clear working knowledge of the fundamentals of bacteriology. *Principal Topics*: Morphology, classification, distribution, cultivation, observation, and physiology of microorganisms; effects of organisms on their environment; microorganisms and health. (*Fundamentals of Bacteriology*—Frobisher; *Laboratory Manual for General Bacteriology* Pettier, Georgi, and Lindgren.)

MR. AULL

BACT. 40—DAIRY BACTERIOLOGY—Semester 2 (2 and 3) 3 cr.

Prerequisite: Bacteriology 31.

Purpose: To give the student a detailed knowledge of bacteriology in its relation to the dairy industry. *Principal Topics*: Bacterial counts on milk, milk fermentations, contamination of milk and cream, reducing the contamination of milk, growth of microorganisms in milk and cream, body cells in milk, spread of diseases through milk and its derivatives; preservation of milk and cream, milk enzymes, bacteriology of prepared milks, ice cream, butter cultures, fermented milks, butter, cheese, tests for the quality of milk and cream. (*Dairy Bacteriology*—Hammer; *Standard Methods of Milk Analysis and Mimeographed Notes.*)

MR. AULL

BACT. 42—SANITARY BACTERIOLOGY—Semester 2 (2 and 3) 3 cr.

Prerequisite: Chemistry 11 and 12.

Suggested: Botany 13 or 14 and Organic Chemistry.

Purpose: This course is designed primarily for Engineering students. After a consideration of the fundamentals of bacteriology, the course is designed to give a knowledge of the relation of bacteriology to water purification and sewage disposal. *Principal Topics*: Morphology, classification, physiology, and cultivation of microorganisms; the bacteria in natural waters, the location and protection of water supplies, water borne diseases, algae and their relation to water supplies, the Colon-Typhoid group of bacteria, the bacteriological examination of water and sewage, the purification of water, operation of control laboratories, bacteriological control of swimming pools, the bacteriology of sewage and sewage effluents and methods of sewage disposal. (*Microbiology of Water and Sewage for Engineering Students*—Gainey.)

MR. AULL

BACT. 44—SOIL MICROBIOLOGY—Semester 2 (2 and 3) 3 cr.

Prerequisite: Bacteriology 31.

Purpose: To give the student accurate knowledge of the importance of microorganisms in the maintenance of soil fertility. *Principal Topics*: The soil and the plant, the microbe and its activities, the soil population, the role of microbes in the decomposition of organic substances, transformation of nitrogen, transformation of mineral substances in soil by the action of microorganisms, interrelationships between higher plants and soil microorganisms, modification of the soil population, importance of microbes in soil fertility. (*Principles of Soil Microbiology*—Waksman.)

MR. AULL

BOTANY

MR. ARMSTRONG

MR. ROSENKRANS MR. TAYLOR MR. PRINCE

BOT. 11—GENERAL BOTANY—Semester 1 (2 and 4) 3 1/3 cr.

Purpose: To give a general survey of the principles manifest in the life of plants. *Principal Topics*: The first part of the semester is de-

voted to a study of the form, structure, and physiology of the higher plants, followed by a study of algae, bacteria, fungi, liverworts, mosses, and ferns, with the application of the biological laws. Descriptions, life histories and adaptation of the representative organisms are considered. This course is designed for General Science students.

MR. ROSENKRANS MR. TAYLOR MR. PRINCE

BOT. 13—AGRICULTURAL BOTANY—Semester 1 (2 and 2) 2 2/3 cr.

Purpose: To give the students knowledge of the different plant organs and their uses. *Principal Topics*: The structure and functions of the various parts of the higher seed plants and the broad principles of metabolism, growth, and reproduction are first taken up, followed by a study of the lower organisms.

MR. ROSENKRANS MR. TAYLOR MR. PRINCE

BOT. 14—AGRICULTURAL BOTANY—Semester 2 (2 and 4) 3 1/3 cr.

A continuation of course 13, dealing with the changes in form, structure, and methods of reproduction from the lower to the higher forms of plants. The latter part of the semester is devoted to practice work in plant identification. (*Field, Forest, and Garden Botany*—Gray.)

MR. ROSENKRANS MR. TAYLOR MR. PRINCE

BOT. 16—GENERAL BOTANY—Semester 2 (2 and 4) 3 1/3 cr.

Purpose: To make the students familiar with the application of biological laws; and descriptions, life histories, and adaptations of representative organisms. *Principal Topics*: The structure and functions of the various parts of the higher seed plants, and the broad principles of metabolism, growth and reproduction are first discussed, followed by a study of the lower organisms. The practical work will consist of laboratory studies illustrating the more important phases of the theoretical work. This course is designed for students in Agricultural Education.

MR. ROSENKRANS MR. TAYLOR MR. PRINCE

BOT. 30— PLANT PHYSIOLOGY—Semester 2 (2 and 4) 3 1/3 cr.

Prerequisite: Botany 11 or 13; one year of Chemistry, and one semester of Physics.

Purpose: To study all the relations and processes which have to do with the maintenance, growth, and reproduction of plants. *Principal*

Topics: Absorption of matter and energy, water relations of the plant, utilization of reserve products and liberation of energy, growth, movement, and reproduction.

MR. ARMSTRONG

BOT. 41—FIELD CROP DISEASES—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Botany 11 or 14; suggested, Botany 30.

Purpose: To give a knowledge of the common field crop diseases and methods for their control. *Principal Topics*: Historical background, fungicides, insects as disseminators of disease, types of organisms causing disease, symptoms, effect upon host plants, and control of the common field crop diseases. (*Elements of Plant Pathology*—Melhus and Kent.)

MR. ARMSTRONG

BOT. 43—ORCHARD AND TRUCK CROP DISEASES—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Botany 11 or 14; Suggested, Botany 30.

Purpose: To study the diseases of fruits and vegetables, and methods for their control. *Principal Topics*: Historical background, fungicides, insects as disseminators of disease, symptoms, effect upon host plants, and control of diseases of fruits and vegetables. (*Elements of Plant Pathology* —Melhus and Kent.)

MR. ARMSTRONG

BOT. 45—PLANT PATHOLOGY—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Botany 11 or 14 or 16.

Purpose: To acquaint the student with the major plant diseases of the South. *Principal Topics*: Plant diseases, symptoms of the diseases, the nature of the causal agencies or factors, and methods of control. (*Elements of Plant Pathology*—Melhus and Kent.)

MR. PRINCE

BOT. 102—MORPHOLOGY AND CLASSIFICATION OF THE FUNGI—Semester 2 (2 and 4) 3 1/3 Credits. (Hours to be arranged)

Prerequisite: Botany 13 and 14.

A course to acquaint the student with the morphology and taxonomy of the fungi through lectures, reports, laboratory work, and field trips. Special attention is devoted to practice in the methods of pure culture as they apply to the different saprophytic and parasitic forms.

MR. PRINCE

CHEMISTRY

	Mr. Calhoun	
Mr. Pollard	Mr. Mitchell	Mr. Hunter
Mr. Carodemos	Mr. Lippincott	Mr. zurBurg
Mr. Gee	Mr. Hodges	Mr. Hawkins

GENERAL CHEMISTRY

Gen. Chem. 11, 12—General Chemistry—Semesters 1 and 2 (3 and 2) 3 2/3 cr.

Purpose: To give the student a general knowledge of the fundamentals of the science of chemistry, through lectures, lecture experiments, and laboratory exercises. *Principal Topics*: A consideration of the basic laws of chemistry and a study of the preparation and properties of the common substances. (*An Introduction to College Chemistry*—Briscoe; *Laboratory Manual, Exercises in General Chemistry*—Hunter.)

Mr. Hunter Mr. zurBurg

Gen. Chem. 13, 14—General Chemistry—Semesters 1 and 2 (3 and 4) 4 1/3 cr.

Purpose: This course is limited to students majoring in Chemistry, Textile Chemistry, or Chemistry-Engineering. The subject matter is taken up in more detail than in Chemistry 11 and 12 and the two additional hours of laboratory work allow some qualitative analysis procedure to be taken up in the second semester. (*An Introduction to College Chemistry*—Briscoe; *Laboratory Manual, Exercises in General Chemistry*—Hunter.)

Mr. Hunter Mr. zurBurg

Gen. Chem. 33, 34—Elementary Chemical Microscopy—Semesters 1 and 2 (2 and 2) 2 2/3 cr.

Prerequisites: Anal. Chem. 21, 22; Org. Chem. 21; Geol. 33.

Purpose: The first semester will be devoted to the study of the laws of crystallography and crystal forms. During the second semester the student may elect either Elementary Chemical Microscopy or Mineralogy. The Elementary Chemical Microscopy will consist of theoretical consideration of the construction of optical instruments and their uses in chemical work. The laboratory work will include a study of the crystalline structure of common chemicals and their microscopic detection, determi-

nation of particle size and the solution of various practical industrial problems which can best be solved by the use of the microscope.

Mr. Calhoun Mr. Hunter Mr. Carodemos

Gen. Chem. 41, 42—Inorganic Chemistry—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: Gen. Chem. 11, 12; *Suggested*: Phys. Chem. 31, 32.

Purpose: A comprehensive survey of the field of inorganic chemistry through lectures and lecture experiments. *Principal Topics*: Development of modern theories of valence and allied subjects and a detailed study of the elements and their compounds, based on the periodic system and including both well-known and rarer elements. (*Systematic Inorganic Chemistry*—Caven and Lander.)

Mr. Hunter

Gen. Chem. 45—History of Chemistry—Semester 1 (2 and 0) 2 cr.

Prerequisite: Org. Chem. 21, 22.

Principal Topics: A study of the development of the science of chemistry from the earliest times to the present day. (*History of Chemistry*—J. R. Partington.)

Mr. Pollard

Gen. Chem. 50—Thesis—Semester 2 (0 and 9) 3 cr.

Principal Topics: Original investigation of an assigned problem in some branch of chemistry selected by the student. This work may be carried out under the supervision of any qualified member of the staff. A thesis covering the work is a requirement of the course.

Staff of School of Chemistry

ANALYTICAL CHEMISTRY

Anal Chem. 21—Qualitative Analysis—Semester 1 (2 and 6) 4 cr.

Prerequisite: Gen. Chem. 11, 12.

Purpose: To emphasize the principles involved in chemical analysis, to broaden the student's knowledge of inorganic chemistry, to develop

deductive reasoning power, and to give practice in manipulation. *Principal Topics*: Solutions and ionization; mass action and the law of chemical equilibrium; solubility product principle; hydrolysis, amphoterism, complex ions; gaseous-liquid and liquid-liquid systems; reactions and equations. The laboratory work consists of analysis of unknown salt mixtures, industrial products, and alloys. (*Qualitative Analysis*—Engelder.)

MR. LIPPINCOTT

ANAL. CHEM. 22—QUANTITATIVE ANALYSIS—Semester 2 (2 and 6) 4 cr.

Prerequisite: Gen. Chem. 11, 12.

Purpose: To give training for the more advanced work; the time is spent on simple quantitative analyses, both volumetric and gravimetric, which are typical of the subdivisions of the subject. *Principal Topics*: Volumetric analysis; gravimetric analysis; concentration of solutions, acidimetry and alkalimetry; oxidation and reduction, iodimetry; theory of electrolysis, assaying, stoichiometry. The laboratory work consists of the preparation of decinormal solutions; analysis of soda ash, sulphate, chloride, pyrolusite, iron ore, bleaching powder, silver coin, and limestone. (*Quantitative Analysis*—Engelder; *Laboratory Manual of Introductory Quantitative Analysis*—Nichols.)

MR. LIPPINCOTT

ANAL. CHEM. 23—QUALITATIVE ANALYSIS—Semester 1 (2 and 3) 3 cr.

Prerequisite: Gen. Chem. 11, 12.

Purpose: To emphasize for pre-medical students the principles involved in chemical analysis, to broaden the student's knowledge of inorganic chemistry, to develop deductive reasoning power, and to give practice in manipulation. *Principal Topics*: Solutions and ionization; mass action and the law of chemical equilibrium; solubility product principle; hydrolysis, amphoterism, complex ions; gaseous-liquid and liquid-liquid systems, reactions and equations. The laboratory work consists of analysis of unknown salt mixtures, industrial products, and alloys. (*Qualitative Analysis*—Engelder.)

MR. LIPPINCOTT

ANAL. CHEM. 24—QUANTITATIVE ANALYSIS—Semester 2 (2 and 3) 3 cr.

Prerequisite: Gen. Chem. 11, 12.

Purpose: To give training to pre-medical students for the more advanced work; the time is spent on simple quantitative analyses, both volumetric and gravimetric, which are typical of the subdivisions of the subject. *Principal Topics*: Volumetric analysis; gravimetric analysis; concentration of solutions, acidimetry and alkalimetry; oxidation and reduction, iodimetry; theory of electrolysis, assaying, stoichiometry. The laboratory work consists of the preparation of decinormal solutions; analysis of soda ash, sulphate, chloride, pyrolusite, iron ore, bleaching powder, silver coin, and limestone. (*Quantitative Analysis*—Engelder; *Laboratory Manual of Introductory Quantitative Analysis*—Nichols.)

Mr. Lippincott

Anal Chem. 31—Quantitative Analysis—Semesters 1 and 2 (1 and 3) 2 cr.

Prerequisite: Anal. Chem. 22.

Purpose: To give further training and experience in quantitative chemical analysis through lectures and laboratory work. This course involves both gravimetric and volumetric analysis. *Principal Topics*: Complete analysis of clays, silicates, a partial analysis of coal, pig iron, and steel. Volumetric analysis includes the determination of arsenic, copper, and lead in insecticides. Quantitative analysis of alloys, including some quantitative electrometric separations. (*Quantitative Analysis*—Mahin.)

Mr. Mitchell

Anal. Chem. 41—Technical Analysis—Semester 1 (1 and 6) 3 cr.

Prerequisite: Anal. Chem. 21 or 22.

Purpose: To study the chemical principles involved, and give training and experience in the analysis of a great many industrial products. Special attention is given to the standard, accurate methods. *Principal Topics*: Fertilizer analysis, organic and mineral analysis of feeding materials; complete water analysis, both mineral and sanitary; the analysis of sugar products, special attention being given to the use of the polariscope in this work. (Methods of the Association of Official Agricultural Chemists.)

Mr. Mitchell

ANAL. CHEM. 42—STOICHIOMETRY—Semester 2 (2 and 0) 2 cr.

Prerequisite: Gen. Chem. 11, 12.

Purpose: To study various types of fundamental problems in chemistry through lectures and classroom work. *Principal Topics*: Balancing equations, principally oxidation and reduction reactions, gas law problems, atomic and molecular weights; factors; electrochemical problems; standard solutions; problems dealing with indirect analysis; calculations involving the elimination or introduction of a constituent; acidimetry and alkalinity; adjusting solutions to a desired normality and oxidation and reduction problems. (*Calculations of Quantitative Chemical Analysis*—Hamilton and Simpson.)

MR. MITCHELL

ANAL. CHEM. 50—THESIS—Semester 2 (0 and 9) 3 cr.

Principal Topics: Original investigation of an assigned problem in some branch of chemistry selected by the student. This work may be carried out under the supervision of any qualified member of the staff. A thesis covering the work is a requirement of the course.

STAFF OF SCHOOL OF CHEMISTRY

INDUSTRIAL CHEMISTRY

IND. CHEM. 41, 42—INDUSTRIAL CHEMISTRY—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: Junior or Senior standing. *Suggested*: Phys. Chem. 31, 32.

Purpose: To study processes, operations, and reactions of chemical manufacture as related to such industries as paper, glass, fertilizer, sugar, leather, petroleum, etc. Visits are made to various plants and inspection reports made.

MR. ZURBURG

IND. CHEM. 50—THESIS—Semester 2 (0 and 9) 3 cr.

Principal Topics: Original investigation of an assigned problem in some branch of chemistry selected by the student. This work may be carried out under the supervision of any qualified member of the staff. A thesis covering the work is a requirement of the course.

STAFF OF SCHOOL OF CHEMISTRY

ORGANIC CHEMISTRY

ORG. CHEM. 21—ORGANIC CHEMISTRY—Semester 1 (3 and 6) 5 cr.

Prerequisite: Gen. Chem. 11, 12.

Purpose: To introduce into the broad field of organic chemistry those students who will major in chemistry and chemical engineering, also those who are enrolled in the pre-medical course. In this course the general principles of organic chemistry and the general properties of the various classes of organic compounds are thoroughly studied. *Principal Topics*: Hydrocarbons of the methane, ethylene and acetylene series; halogen derivatives; alcohols, ethers; aldehydes and ketones; monobasic and polybasic acids and their derivatives, substituted acids, urea, nitriles and amines; compounds of arsenic, phosphorus, sulphur and metals, carbohydrates. The laboratory work consists of the preparation of typical compounds in which technique, purity, and yield are stressed. (*Textbook of Organic Chemistry*—Wertheim; *Laboratory Outlines for Organic Chemistry*—Boord et al.)

MR. CARODEMOS

ORG. CHEM. 22—ORGANIC CHEMISTRY—Semester 2 (3 and 6) 5 cr.

Prerequisite: Org. Chem. 21.

Purpose: Same as in Org. Chem. 21. *Principal Topics*: Aromatic hydrocarbons; halogen derivatives, sulfonic acids; nitro compounds and amines, diazo and azo compounds; aromatic alcohols, phenols and ethers; acids, aldehydes, ketones and quinones; Grignard and Friedel-Crafts reactions; organometallic compounds; polynuclear hydrocarbons and derivatives; terpenes; dyes; alicyclic and heterocyclic compounds; proteins. In the laboratory typical aromatic compounds are prepared. (*Textbook of Organic Chemistry* — Wertheim; *Laboratory Outlines for Organic Chemistry*—Boord et al.)

MR. CARODEMOS

ORG. CHEM. 23, 24—AGRICULTURAL ORGANIC CHEMISTRY—Semesters 1 and 2 (3 and 3) 4 cr.

Prerequisite: Gen. Chem. 11, 12.

Purpose: To promote a thorough understanding of the fundamentals of plant and animal biochemistry. *Principal Topics*: Emphasis is placed on nomenclature, properties, preparation, reaction and uses of radicals and compounds of organic substances which are known to give rise to understanding of plant and animal biochemistry. A thorough study of carbohydrates, fats, proteins, pigments, vitamins, essential oils and associated

substances of plant and animal origin. (*Organic Chemistry*—Richter; *Laboratory Manual*: *Laboratory Practices of Organic Chemistry*—Williams and Brewster.)

MR. GEE

ORG. CHEM. 25—ORGANIC CHEMISTRY—Semester 1 (2 and 0) 2 cr.

Purpose: To acquaint the students in Vocational Agricultural Education with the principals of carbon chemistry. *Principal Topics*: The scope of study includes generalized properties and characteristics of organic substances of value to students preparing to teach Vocational Agriculture. (*Introduction to Organic Chemistry*—Garard.)

MR. GEE

ORG. CHEM. 31—ADV. ORGANIC CHEMISTRY—Semester 1 (2 and 3) 3 cr.

Prerequisite: Org. Chem. 22.

Purpose: To review and study more intensively representative classes of organic compounds, and to survey available methods for establishing the structure and configuration of organic molecules. The laboratory work deals with the systematic identification of organic compounds. (*References*: *Identification of Organic Compounds*—Shriner and Fuson.)

MR. CARODEMOS

ORG. CHEM. 32—ADV. ORGANIC CHEMISTRY—Semester 2 (2 and 3) 3 cr.

Prerequisite: Org. Chem. 31.

Purpose: Same as in Org. Chem. 31, with additional emphasis on the synthesis of compounds. These syntheses are carried out in the laboratory, where the student repeats some extended pieces of work and compares his results with those published. (References; *Organic Syntheses,* Vol. 1—Wiley and Sons.)

MR. CARODEMOS

ORG. CHEM. 34—DAIRY CHEMISTRY—Semester 2 (2 and 3) 3 cr.

Prerequisite: Org. Chem. 23, 24; Suggested, Anal. Chemistry 21, 22.

Purpose: A study of Chemistry in its relation to the dairy industry. *Principal Topics*: Acquainting the student with the manipulation of apparatus found in the modern dairy laboratory; analyses of milk and dairy products; detection of adulterants, preservatives, colors, and causes of spoilage of dairy products. (References.)

MR. GEE

ORG. CHEM. 41, 42—GENERAL BIOCHEMISTRY—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: Anal. Chem. 21, 22; Org. Chem. 21; *Suggested*: Phys. Chem. 31.

Purpose: To give a comprehensive outlook and an acquaintance with the broader aspects of biochemistry. This course is of particular value to the pre-medical, pre-dental, and agricultural student. (*Outlines of Biochemistry*—Gortner.)

MR. CARODEMOS

ORG. CHEM. 50—THESIS—Semester 2 (0 and 9) 3 cr.

Principal Topics: Original investigation of an assigned problem in some branch of chemistry selected by the student. This work may be carried out under the supervision of any qualified member of the staff. A thesis covering the work is a requirement of the course.

STAFF OF SCHOOL OF CHEMISTRY

PHYSICAL CHEMISTRY

PHYS. CHEM. 31, 32—PHYSICAL CHEMISTRY—Semesters 1 and 2 (3 and 0) 3 cr.

Prerequisites: Calculus; Anal. Chem. 22; Org. Chem. 21, 22.

Purpose: Modern chemical theories of matter, solutions and reactions. *Principal Topics*: Gases, liquids, and solids; thermochemistry; theory of solutions; chemical kinetics; equilibrium in homogeneous and heterogeneous systems; elementary electro-chemistry. (*Outlines of Theoretical Chemistry*—Getman and Daniels.)

MR. POLLARD

PHYS. CHEM. 33, 34—PHYSICAL CHEMISTRY LABORATORY—Semesters 1 and 2 (0 and 4) 2 cr.

This course must be taken with Phys. Chem. 31, 32.

Purpose: Laboratory determinations of physico-chemical properties, and laboratory studies of physical chemical principles. (*Exercises in Physical Chemistry*—Pollard.)

MR. POLLARD

PHYS. CHEM. 41, 42—COLLOID CHEMISTRY—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: Phys. Chem. 31, 32.

Purpose: The general theory of colloid chemistry and its applications. *Principal Topics*: Absorption, contract catalysis, surface tension, preparation, and properties of colloidal solutions, gelatinous precipitates and jellies, emulsions, foams, fog, smoke. (*Colloid Chemistry*—W. D. Bancroft.)

MR. POLLARD

PHYS. CHEM. 43, 44—ELECTROCHEMISTRY—Semesters 1 and 2 (1 and 2) 2 cr.

Prerequisite: Phys. Chem. 31, 32.

Purpose: Theoretical and applied electrochemistry with laboratory practice in electrochemical measurements and determinations. (*Theoretical and Applied Electrochemistry*—Thompson.)

MR. POLLARD

PHYS. CHEM. 50—THESIS—Semester 2 (0 and 9) 3 cr.

Principal Topics: Original investigation of an assigned problem in some branch of chemistry selected by the student. This work may be carried out under the supervision of any qualified member of the staff. A thesis covering the work is a requirement of the course.

STAFF OF SCHOOL OF CHEMISTRY

CIVIL ENGINEERING

MR. CLARKE

MR. GLENN MR. QUATTLEBAUM

MR. GAYLORD

C. E. 21, 22—SURVEYING—Semester 1 (2 and 0) 2 cr. Semester 2 (3 and 0) 3 cr.

Prerequisite: Math. 11, 12, 13, 14; Drawing 13, 14.

Purpose: To give the student considerable facility in the theory and use of modern surveying instruments and methods, in both field and office

work. *Principal Topics*: Survey of tract, computation of area; description by metes and bounds; U. S. Public Land Surveys; differential and profile leveling and plotting; topographic surveying and mapping. (*Davis and Foote.*)

MR. CLARKE

C. E. 21a, 22a—SURVEYING FIELD AND OFFICE WORK—Semester 1 (0 and 3) 1 cr. Semester 2 (0 and 2) 2/3 cr.

Prerequisite: Math. 11, 12, 13, 14; Drawing 13, 14.

Purpose: To put into practice the theoretical principles covered in C. E. 21, 22; which subject must be scheduled concurrently with this. The work during the first semester covers surveys of tracts for legal description and computation of area; differential and profile leveling and plotting. The work during the second semester covers topographic surveying and mapping. (*Davis and Foote.*)

MR. CLARKE

C. E. 23—SURVEYING—Semester 1 or 2 (1 and 0) 1 cr.

Prerequisite: Math. 11, 12, 13, 14; Drawing 13, 14; Registration in C. E. 23a.

Purpose: To give students not majoring in Civil Engineering practice in making preliminary surveys for, and computing cost of, engineering projects. *Principal Topics*: The use of surveying instruments, maps, profiles, cross-sections, land measurement, earth-work computations, and road location. (*Elementary Surveying*—Rayner.)

MR. GAYLORD

C. E. 23a—SURVEYING FIELD AND OFFICE WORK—Semester 1 or 2 (0 and 2) 2/3 cr.

Prerequisite: Math. 11, 12, 13, 14; Drawing 13, 14; Registration in C. E. 23.

Purpose: To put into practice the theoretical principles covered in C. E. 23. (*Elementary Surveying*—Rayner.)

MR. GAYLORD

C. E. 28—MATERIALS AND METHODS OF CONSTRUCTION—Semester 2 (2 and 0) 2 cr.

Purpose: To familiarize the student with the common materials and technical terms used in construction, and the ways in which the materials are used. *Principal Topics*: Foundations on soft soils; concrete, brick, and stone masonry; wood, steel, and reinforced concrete construction; floor and roof coverings; plastering and painting; and methods of cost-keeping. (*Building Construction*—Huntington.)

MR. CLARKE

C. E. 30—Summer Surveying Camp

Between the Sophomore and Junior years, two weeks in June, at *Camp Clarke,* near Steedman, S. C. 3 credits.

Prerequisite: C. E. 21, 22.

Purpose: To give civil engineering students experience not only in camp organization and sanitation, but also in meeting field problems which arise in a rough country, several miles away from headquarters. *Principal Topics*: Reconnaissance, preliminary survey, and final location survey for a road between two selected termini, including plotting of map and profile. (See also C. E. 36.)

Mr. Clarke Mr. Quattlebaum Mr. Gaylord

C. E. 31—Mechanics—Semester 1 (3 and 0) 3 cr.

Prerequisite: Math. 21, 22. Physics 21, 22, 23, 24.

Purpose: To enable the student to combine his knowledge of mathematics and physics for computing and analyzing balanced forces acting on a point, a member, or a structure. The graphical method of solving problems in statics is also studied. *Principal Topics*: Components, resultants, reactions, moments of forces, center of gravity, moment of inertia. (*Engineering Mechanics*—Fairman and Cutshall.)

Mr. Quattlebaum Mr. Gaylord

C. E. 32—Strength of Materials—Semester 2 (3 and 0) 3 cr.

Prerequisite: C. E. 31 or M. E. 31.

Purpose: To study the strength of brick, stone, concrete, wood, and steel under the action of tensile, compression, flexural, and shearing stresses. The elastic theory is used throughout the course. *Principal Topics*: Compression, tension, shear, modulus of elasticity, riveted joints, beams columns, struts, slab. (*Strength of Materials*—Boyd.)

Mr. Quattlebaum Mr. Gaylord

C. E. 34—Graphic Statics—Semester 2 (1 and 2) 1 2/3 cr.

Prerequisite: C. E. 31.

Purpose: A study is made in this course of the most useful application of graphical analysis to stresses in structures. Stresses due to wind and dead weight on roof trusses are analyzed. The design for one roof truss is worked out in detail. *Principal Topics*: Types of roof trusses, wind loads, dead loads, Maxwell diagrams, string polygons, built up members, column formula. (*Stresses in Framed Structures*—Ketchum.)

Mr. Quattlebaum

C. E. 34A—Graphic Statics—Semester 2 (1 and 2) 1 2/3 cr.

Prerequisite: C. E. 31.

Purpose: To give architectural students a working knowledge of the principles of the graphical analysis of structures with special emphasis on the analysis of roof trusses. Complete designs of both steel and wooden roof trusses are undertaken. *Principal Topics*: Types of roof trusses, dead loads, wind loads, stress analysis, design of trusses in wood and steel. (*Simplified Design of Roof Trusses for Architects and Builders*—Parker.)

Mr. Quattlebaum

C. E. 35—Route Surveying—Semester 1 (3 and 0) 3 cr.

Prerequisite: C. E. 21, 22, 30.

Purpose: To familiarize the student with the special problems which arise in a survey for railroads, highways, canals, sewers, pipe lines, and transmission lines. *Principal Topics*: Theory of simple, compound, and reversed curves; transition spiral; railroad turnouts, computations of earthwork. (*Route Surveying*—Pickels and Wiley.)

Mr. Clarke

C. E. 36—Roads and Pavements—Semester 2 (3 and 3) 4 cr.

Prerequisite: C. E. 21, 22, 30, 35.

Purpose: A study of the design, location, and construction of roads and pavements. *Principal Topics*: Economics of highway construction, location and design. Study of factors relating to highway construction, methods, and materials.

The design period is devoted to the preparation of detailed plans for a highway, using the notes taken in C. E. 30 at the Sophomore Summer Camp. (*Highway Design and Construction*—Bruce.)

Mr. Glenn

C. E. 37—Stresses in Simple Structures—Semester 1 (0 and 4) 1 1/3 cr.

Prerequisites: Math. 21, 22; Physics 21, 22; Drawing 25, 28.

Purpose: The calculation of stresses in statically determinate structures. *Principal Topics*: This course covers the application of the principles of mechanics as applied to the determination of stresses in roof trusses, bents, cranes, bridges and other simple structures. (*Theory of Modern Steel Structures*—Grinter.)

Mr. Quattlebaum

C. E. 38—Design of Simple Structures—Semester 2 (0 and 6) 2 cr.

Prerequisites: Math. 21, 22; Physics 21, 22; Drawing 25, 28; C. E. 37.

Purpose: The study of the elementary principles of design of roof trusses, bents, cranes, bridges and other simple structures of wood and steel. Included in this course is the complete detailed analysis and design of a railroad plate girder bridge. (*AISC Handbook of Steel Construction and Structural Design*—Sutherland and Bowman.)

Mr. Quattlebaum

C. E. 41—Structural Design—Semester 1 (2 and 3) 3 cr.

Prerequisites: Drawing 25, 28; C. E. 31, 34; C. E. 32 or M. E. 31, 49; C. E. 37; C. E. 38.

Purpose: Fundamentals of structural steel design. *Principal Topics*: The complete detailed design of a steel highway bridge along with the economics of design. (*Stresses in Simple Structures*—Urquhart and O'Rourke. *Design of Steel Structures*—Urquhart and O'Rourke.)

Mr. Glenn

C. E. 42—Structural Design—Semester 2 (2 and 6) 4 cr.

Prerequisites: C. E. 31, 32 or M. E. 31, 49, and C. E. 34, 37, 38, 41, 45.

Purpose: A study of the design and construction of reinforced concrete structures. *Principal Topics*: Economics and design of reinforced concrete, bridges, piers, abutments, and retaining walls, and buildings. (*Highway Bridges*—Kirkham; *Design of Concrete Structures*—Urquhart and O'Rourke.)

Mr. Glenn

C. E. 43, 44—Materials Testing Laboratory—Semesters 1 and 2 (0 and 3) 1 cr.

Prerequisite: C. E. 32, 36.

Purpose: A study of the physical properties of construction materials and the standard methods of determining these properties. *Principal Topics*: Physical test and analysis of construction materials, Portland cement, sand, concrete, etc., with special reference to highway materials both bituminous and non bituminous. In this course is included a study of Soil Mechanics as pertains to soil stabilization, with standard tests to determine the physical properties of soils.

Mr. Glenn

C. E. 43.5—Soil Mechanics and Foundations—Semester 1 (2 and 0) 2 cr.

Prerequisite: C. E. 31, 32.

Purpose: To present a rational treatment of the engineering properties of soils as a construction material and its use in solving foundation problems. *Principal Topics*: Classification, permeability, shearing strength, consolidation, stress distribution and bearing capacity of soils. Foundattions above and below water and the design and construction of earth dams. (*Soil Mechanics and Foundations*—Plummer and Dore.)

Mr. Quattlebaum

C. E. 45—Reinforced Concrete Design—Semester 1 (2 and 3) 3 cr.

Prerequisite: C. E. 31, 34, 32, or M. E. 31, 49.

Purpose: A study of theory and practice of reinforced concrete design. *Principal Topics*: Elements of Designs of Reinforced Concrete, beams, slabs, columns, footings, etc. (*Design of Concrete Structures*—Urquhart and O'Rourke.)

Mr. Glenn

C. E. 46—Municipal and Sanitary Engineering—Semester 2 (5 and 0) 5 cr.

Prerequisite: C. E. 49.

Purpose: To familiarize the student with the procedure necessary to supply an adequate amount of potable water for public or private purposes, and the design and construction of sewerage systems and sewage treatment plants. *Principal Topics*: Quantity of water necessary, sources of supply, methods of utilizing source of supply; analysis, treatment of unpotable water; impounding reservoirs, pipe lines, methods of distribution, fire protection; amount of sewage, separate or combined sewerage systems, specific hydraulic problems arising in sewer design,

manholes, and other appurtenances; maintenance of sewers, disposal of sewage by dilution, and methods of treatment by sedimentation, septic tanks, Imhoff tanks, contact beds, trickling filters, intermittent sand filters, activated sludge, principles of irrigation by sewage. (*Water Supply and Sewerage*—Steel.)

MR. CLARKE

C. E. 47—REINFORED CONCRETE DESIGN—Semester 1 (2 and 0) 2 cr.

Prerequisite: C. E. 31, 32, 34, or M. E. 31, 49.

Purpose: To give students not majoring in Civil Engineering a working knowledge of the theory of reinforced concrete design. *Principal Topics*: Design of reinforced concrete slabs, beams, girders, columns. and foundations. (*Design of Concrete Structures*—Urquhart and O'Rourke.)

MR. QUATTLEBAUM

C. E. 48—CITY PLANNING—Semester 2 (2 and 0) 2 cr.

Prerequisite: Registration in Civil Engineering in either the Senior or Junior year. *Elective Course*: Offered only if the registration justifies.

Purpose: To acquaint the student with the special problems confronting a city engineer or city manager not specifically of an engineering nature, but for the solution of which the public looks to the city officials. *Principal Topics*: Origin, growth, and development of cities; streets and street systems; traffic control; railway and water traffic problems; airports; parks and playgrounds; zoning; legal problems involved. (*Principles of City Planning*—Lohmann.)

MR. CLARKE

C. E. 49—HYDRAULICS—Semester 1 (3 and 0) 3 cr.

Prerequisite: Math. 21, 22; Phys. 21, 22, 23, 24.

Purpose: To acquaint the student with the behavior of water at rest or in motion. *Principal Topics*: Pressures exerted by water at rest; methods of measuring pressure; principles of water in motion; Bernoulli's theorem; measurement of water by orifices, weirs, nozzles, and Venturi meters; flow of water through short and long pipes; flow of water in open channels. (*Hydraulics*—Schoder and Dawson.)

MR. CLARKE MR. WACHTER

C. E. 50—Thesis—Semester 1 or 2. 1 or 2 credits. (3 credits for exceptional work.)

Civil Engineering students of exceptional ability, with the permission of the Head of the Civil Engineering department, may choose as an elective the preparation and submission of a thesis covering some phase of Civil Engineering. This thesis may be either an independent experimental investigation entered into with the hope of discovery of new engineering knowledge, or the independent prosecution of some already somewhat stabilized problem in engineering design. Those students who desire to submit a thesis, as a part of their free electives, must present to the Head of the Civil Engineering Department not less than one month prior to the opening of the semester during which the thesis work is intended to be done, a complete outline of the work contemplated in the proposed thesis and the projected method of procedure. (Amount of credit given depends upon the nature of the subject, the amount of time devoted to it, and the quality of the work.)

Mr. Clarke

DAIRY

Mr. LaMaster Mr. Goodale

Dairy 21—Introductory Dairying—Semester 1 or 2 (2 and 2) 2 2/3 cr.

Purpose: To give a practical working knowledge of dairy husbandry and dairy products. *Principal Topics*: History of dairying, dairy breeds, feeds and feeding, judging dairy animals, dairy farm buildings, quality milk production, testing milk and some of its products, the manufacture of milk products, and the food value of milk and milk products.(*Elements of Dairying*—T. M. Olson.)

Mr. Goodale

Dairy 31—Dairy Cattle Judging—Semester 1 (0 and 3) 1 cr.

Prerequisite: Dairy 21.

Purpose: To give an understanding of dairy form, breed type, and relations between form and function in dairy cattle. *Principal Topics*: Study of score cards, show yard requirements and classifications; fitting cattle for show and sale; values as influenced by form; buying dairy cattle; practice in judging Jersey, Guernsey and Holstein cattle of all ages.

Mr. LaMaster

DAIRY 32—GENETICS—Semester 2 (2 and 2) 2 2/3 cr.

Suggested antecedent course: Ag. Ec. 33.

Purpose: To give the student an understanding of the principles of heredity and variation with special reference to their application to the animal kingdom. *Principal Topics*: Mendel's law, physical basis of inheritance, chromosome theory, linkage, expression and interaction of factors, origin of hereditary differences, inheritance of quantitative characters, biometric methods. (*Principles of Genetics*—Sinnot and Dunn—Third Edition.)

MR. LAMASTER

*DAIRY 34—DAIRY PLANT ORGANIZATION AND MANAGEMENT—Semester 2 (3 and 0) 3 cr.

Prerequisite: Dairy 21.

Purpose: To give a comprehensive understanding of the business of operating dairy plants with special emphasis on organization and practical management problems. *Principal Topics*: Survey before organization, form of organization, creamery construction, sewage disposal, refrigeration, labor, purchasing raw materials, equipment and supplies, power, water, rent, depreciation, interest, insurance, overrun, mechanical losses, manufacturing unit costs, marketing records, salesmanship, advertising, business correspondence, credits and collections, creamery bookkeeping, drawing creamery plans, and mathematical problems for the dairy plant operator. (*Management of Dairy Plants, Revised Edition,* 1938—Mortensen.)

MR. GOODALE

DAIRY 35—DAIRY CATTLE FEEDING AND MANAGEMENT—Semester 1 (2 and 2) 2 2/3 cr.

Purpose: To give the fundamental principles in the care, feeding, and management of dairy cattle of all ages. *Principal Topics*: General considerations in selecting a breed, selecting the individual cow, calf raising, growth and development, raising dairy heifers, care and management of the milking herd, milking factors, feeding for milk production, stables for cows, dairy barn equipment, handling manure. (*Dairy Cattle Feeding and Management, Third Edition,* 1938—Henderson.)

MR. LAMASTER

*Dairy 34 and 36 are given in alternate years. Dairy 36 will be offered in 1941-1942.

*Dairy 36—Market Milk—Semester 2 (3 and 0) 3 cr.

Prerequisite: Dairy 21.

Purpose: To give a comprehensive understanding of the care and handling of market milk. *Principal Topics*: Size and importance of market milk industry, chemical and physical properties of milk and its constituents, microbiology of milk, chemical and bacteriological examination of milk, food value of milk, grades, production of clean milk, cooling methods, refrigeration, inspection methods, judging milk and cream, dairy buildings, milk plant operation, transportation and distribution of milk, and mathematical problems in common use. (*Market Milk and Related Products*—Sommer.)

Mr. Goodale

Dairy 41—Dairy Manufactures (Butter and Soft Cheeses)—Semester 1 (2 and 3) 3 cr.

Prerequisite: Dairy 21 and Chem. 34.

Purpose: To give a thorough knowledge of the manufacture of creamery butter, and the processing of soft cheeses. *Principal Topics*: History of butter making, care of cream on the farm, buying and grading cream, inspection and testing methods, neutralization, pasteurization, starters and cream ripening, churning cream and all subsequent processes until butter is ready for market, composition control, butter scoring, butter storage, marketing equipment, refrigeration and sanitation. Also studies on complete processing methods for common varieties of soft cheeses. (*Butter*—Fourth Edition, 1939—Totman, McKay and Larsen.)

Mr. Goodale

Dairy 42—Dairy Manufactures (Ice Cream and Condensed Milks)—Semester 2 (2 and 4) 3 1/3 cr.

Prerequisite: Dairy 21 and Chem. 38.

Purpose: A thorough study of ice cream manufacture and the related problems of producing condensed milk and milk powder. *Principal Topics*: History of ice cream making, classification, composition, ingredients used, standardizing mixes, processing mixes, testing, freezing, whipping abilities, defects in ice cream, handling, packaging, hardening, shipping, sugars, egg products, stabilizers, chocolate products, vanillas,

*Dairy 34 and 36 are given in alternate years. Dairy 36 will be offered in 1941-1942.

fruits, ices and sherbets, specials, costs and merchandising, ice cream as a food, and bacteriology of ice cream. Also study of condensed milks and milk powders as related to the ice cream industry. (*Ice Cream Making*—Sommer, third edition.)

MR. GOODALE

DAIRY 43—DAIRY CATTLE BREEDING—Semester 1 (1 and 2) 1 2/3 cr.

Prerequisite: Dairy 32, Genetics.

Purpose: To give the student an understanding of the methods used in developing and improving the breeds of dairy cattle. *Principal Topics*: Breed history, pedigrees, advanced register, methods of indexing proved sires, statistical study of the relations of environment to production.

MR. LAMASTER

DAIRY 48—THE NUTRITION OF DAIRY CATTLE—Semester 2 (2 and 0) 2 cr.

Prerequisite: Dairy 35.

Purpose: To give the student an understanding of the methods by which the animal body converts vegetable products into animal products. *Principal Topics*: Composition of animals and feeding stuffs, digestion and resorption, circulation, respiration, and excretion, metabolism, balance of nutrition, requirements for maintenance, growth, reproduction, and milk production, function of minerals and vitamins. (*Animal Nutrition*—Maynard.)

MR. LAMASTER

DAIRY 51—SEMINAR—Semester 1 (1 and 0) 1 cr.

DAIRY 52—SEMINAR—Semester 2 (1 and 0) 1 cr.

Prerequisite: Dairy 21 and Dairy 35.

Purpose: To study special research problems in production and manufactures and to report the exposition of the results by thesis. *Principal Topics*: Special selected individual topics not fully covered in course work, with emphasis placed on latest research.

MR. LAMASTER MR. GOODALE

DRAWING

MR. KLUGH

MR. HARRIS MR. HODGE *MR. DOUGLASS MR. SHIGLEY
MR. BRADBURY

DRAWING 11—FREEHAND DRAWING—Semester 1 (0 and 2) 2/3 cr.

Purpose: To give the student a training in seeing and representing proportion and detail. *Principal Topics*: Proportion, detail, perspective.
MR. HODGE *MR. DOUGLASS MR. BRADBURY

DRAWING 12—MECHANICAL DRAWING—Semester 2 (0 and 2) 2/3 cr.

Purpose: To train the student in the fundamentals of mechanical drawing to the point that he will be able to read drawings and make drawings of simple subjects. *Principal Topics*: Orthographic projection, dimensioning, blue printing. (Text to be announced.)
MR. HODGE *MR. DOUGLASS MR. BRADBURY

DRAWING 13—ENGINEERING DRAWING—Semester 1 (0 and 4) 1 1/3 cr.

Purpose: To give the student a thorough grounding in the fundamental principles of Engineering Drawing. *Principal Topics*: Lettering, orthographic projection, threads, sectioning, tracing. (*Engineering Drawing*—French.)
MR. HARRIS MR. SHIGLEY *MR. DOUGLASS MR. BRADBURY

DRAWING 14—ENGINEERING DRAWING—Semester 2 (0 and 4) 1 1/3 cr.

Prerequisite: Drawing 13.

Purpose: To continue Drawing 13, bringing in refinements and details that time did not permit in the fundamental course. About one-half of this course will be freehand sketching. (*Engineering Drawing*—French.)
MR. HARRIS MR. SHIGLEY *MR. DOUGLASS MR. BRADBURY

DRAWING 25—MECHANICAL DRAWING—Semester 1 (0 and 2) 2/3 cr.

Prerequisite: Drawing 14.

Purpose: To ground the student in those fundamentals and essentials of the language of the engineer. *Principal Topics*: A continuation of

*On leave 1940-1941.

the work given in Drawing 14; the descriptive geometry applications to graded problems, reading drawings, and layout work. (*Notes and Engineering Drawing*—French.)

MR. KLUGH *MR. DOUGLASS MR. SHIGLEY

DRAWING 26—ELEMENTARY DESIGN AND KINEMATICS—Semester 2 (0 and 2) 2/3 cr.

Prerequisite: Drawing 25.

Purpose: To train the student to apply problems in drafting room solution. *Principal Topics*: Elementary principles in Machine Design, carefully studied and worked and in class problems, theory and practice involving problems in Kinematics and applications to some principles in machine design. (*Engineering Kinematics*—Smith.)

MR. KLUGH *MR. DOUGLASS MR. SHIGLEY

DRAWING 28—STRUCTURAL DRAWING—Semester 2 (0 and 2) 2/3 cr.

Prerequisite: Drawing 25.

Purpose: To acquaint the student with those needful helps in taking up major design problems in the structural field. *Principal Topics*: Elementary structural principles; study of symbols, proportions, and minor design, reading of structural drawings, study of methods in drafting, tracing, and blue printing. (*Engineering Drawing*—French.)

MR. KLUGH *MR. DOUGLASS MR. SHIGLEY

DRAWING 31—MACHINE DESIGN—Semester 1 (0 and 3) 1 cr.

Prerequisite: Drawing 26.

Purpose: To teach the student the aid of layouts in the solution of many of his problems. *Principal Topics*: The course is a continuation of Drawing 26, giving a more extended course in the theory and application of design problems; calculations required and specifications stressed. (*Notes and Engineering Kinematics*—Smith.)

MR. KLUGH *MR. DOUGLASS MR. SHIGLEY

DRAWING 32—MACHINE DESIGN—Semester 2 (0 and 3) 1 cr.

Prerequisite: Drawing 31.

*On leave 1940-1941.

Purpose: To give the proper background to the student before he takes up the design problems in his major subject. *Principal Topics*: Simple problems in design, stressing the theory of design and application to specific problems. Calculations required, discussions encouraged concerning involved problems, theory stressed above other things, for the purpose of understanding some principles needed in the design of machines. (*Machine Design*—Bradford and Eaton.)

Mr. Klugh Mr. Shigley

ECONOMICS

Mr. Ward

*Mr. Gates **Mr. Hodges Mr. Burtner

Econ. 23, 24—Principles of Economics—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: Sophomore standing.

Purpose: To teach fundamental principles and lay the foundations for more detailed study of special problems. *Principal Topics*: Theory of value; specialization and exchange; land, labor, and capital as productive forces; rent, wages, interest, and profits as distributive shares of the national income; money and banking; risk-taking; business cycles, and foreign trade.

Mr. Ward *Mr. Gates **Mr. Hodges Mr. Burtner

Econ. 31—Contemporary Economic Problems—Semester 1 or 2 (3 and 0) 3 cr.

Prerequisite: Econ. 23 and 24.

Purpose: To present a critical analysis of the attacks on the structure and workings of the present economic system and of the leading proposals for the economic reorganization of society. *Principal Topics*: The integration of industry; industrial conflict; labor problems, the price system and its control; social insurance; government ownership and regulation; comprehensive programs of economic policy such as liberalism, socialism, and economic planning.

Mr. Ward

---

*On leave 1940-1941.

**In place of Mr. Gates on leave.

ECON. 32—MONEY AND BANKING—Semester 2 (3 and 0) 3 cr.

Prerequisite: Econ. 23 and 24.

Purpose: To survey the field of monetary standards and banking systems, together with a comprehensive study of the principles of money and banking. *Principal Topics*: The origin, nature, and functions of money; monetary standards, monetary history of the United States; money and prices; commercial banking and its development in the United States; foreign exchange; the Federal Reserve System, and the problem of price stabilization.

MR. WARD

ECON. 44—INTRODUCTION TO BUSINESS—Semester 2 (3 and 0) 3 cr.

Prerequisite: Economics 23 and 24, and permission of the instructor.

Purpose: To acquaint the student with the organization of American industries, the terms used, methods followed, problems encountered, and ways in which they are handled by business men. *Principal Topics*: The tools of industrial inquiry; business organization; production methods, problems and costs; labor relations and labor problems; prices and price arrangements; financing methods and problems; tax calculations and problems and industrial and economic planning.

*MR. GATES **MR. HODGES

ELECTRICAL ENGINEERING

MR. RHODES

MR. TINGLEY MR. CREDLE MR. STEVENSON MR. THERKELSEN
MR. KING

E. E. 22—ELECTRIC CIRCUITS—Semester 2 (2 and 0) 2 cr.

Prerequisite: Concurrent with Phys. 22 and Math. 22.

An introductory course for sophomore electrical engineers dealing with basic ideas and the fundamental laws of electric and electromagnetic circuits.

MR. RHODES MR. TINGLEY

*On leave 1940-1941.
**In place of Mr. Gates on leave.

E. E. 25—Engineering Problems—Semester 1 or 2 (0 and 3) 1 cr.

Prerequisite: Math. 11,12, 13, 14.

A study of the theory and application of the slide rule to the solution of engineering problems. This course also offers an excellent opportunity for review of fundamental mathematical processes and elementary engineering principles.

Mr. King

E. E. 31—Direct-Current Machinery—Semester 1 (5 and 0) 5 cr.

Prerequisite: Phys. 21, 22; Math. 21, 22; E. E. 22.

The theory, construction, and operating characteristics of direct-current generators and motors; industrial applications; control equipment; and direct current transmission and distribution. This course also includes continuation work on basic principles begun in E. E. 22.

Mr. Rhodes Mr. Tingley

E. E. 31a—Electrical Measurements—Semester 1 (0 and 4) 1 1/3 cr.

Prerequisite: Must parallel or follow E. E. 31.

A laboratory study of the principles of direct-current, magnetic, and electrostatic circuits and the instruments used in their measurement. Emphasis is placed on proper choice of equipment, correct laboratory procedure and accurate presentation of results.

Mr. Credle

E. E. 32—Alternating-Current Circuits—Semester 2 (5 and 0) 5 cr.

Prerequisite: E. E. 31.

The theory of the reactions of electric circuit constants to alternating currents and the development of a logical mathematical solution of single-phase and polyphase circuits.

Mr. Tingley Mr. Credle

E. E. 32a—Electrical Laboratory—Semester 2 (0 and 4) 1 1/3 cr.

Prerequisite: E. E. 31. Must parallel or follow E. E. 32.

Part I. Tests to determine the principal characteristics of direct-current generators, motors and auxiliaries.

Part II. Experiments on single-phase and polyphase alternating current circuits. Embraces a study of leading types of alternating current instruments.

Mr. Credle

E. E. 33—Direct-Current Machinery—Semester 1 (4 and 0) 4 cr.

Prerequisite: Phys. 21, 22; Math. 21, 22.

The laws of the electric and magnetic circuits; the theory and operating characteristics of direct-current generators and motors; efficiency of direct-current machinery; direct-current distribution.

Mr. Stevenson

E. E. 33a—Electrical Measurements—Semester 1 (0 and 3) 1 cr.

Prerequisite: Must parallel or follow E. E. 33.

A course embracing essentially the same experiments as those given in E. E. 31a, but planned for students in mechanical engineering.

Mr. Stevenson Mr. King

E. E. 34—Alternating-Current Circuits—Semester 2 (4 and 0) 4 cr.

Prerequisite: E. E. 33.

Single-phase and polyphase circuits; alternating-current instruments; theory of alternating-current transformers.

Mr. Stevenson

E. E. 34a—Electrical Laboratory—Semester 2 (0 and 3) 1 cr.

Prerequisite: Must parallel or follow E. E. 34.

A course embracing essentially the same experiments as those of E. E. 32a, but specifically planned for students in mechanical engineering.

Mr. Stevenson

E. E. 35—Electrical Machinery—Semester 1 (2 and 0) 2 cr.

Prerequisite: Phys. 11, 12 or Phys. 21, 22.

An elementary course in direct-current and alternating-current machinery. Intended primarily to acquaint the student with the adaptability of electric motors for specific applications.

Mr. Therkelsen Mr. King

E. E. 35a—Electrical Laboratory—Semester 1 (0 and 2) 2/3 cr.

Prerequisite: Physics 11, 12 or Physics 21, 22.

A series of experiments demonstrating the principal applications of motors and other electrical equipment.

Mr. Therkelsen Mr. King

E. E. 36—Electrical Machinery—Semester 2 (3 and 0) 3 cr.

Prerequisite: Phys. 21, 22.

An elementary course in direct-current and alternating-current machinery with special emphasis on operating characteristics and adaptability of specific types for certain duties.

Mr. Therkelsen

E. E. 36a—Electrical Laboratory—Semester 2 (0 and 2) 2/3 cr.

Prerequisite: Physics 21, 22.

A number of laboratory demonstrations of the characteristics of electrical equipment used by civil engineers.

Mr. Therkelsen

E. E. 38—Vocational Electricity—Semester 2 (1 and 2) 1 2/3 cr.

Prerequisite: E. E. 35.

Planned for teachers in high schools. It embraces (1) the application of elementary principles of electricity and magnetism to experiments and projects of special interest and value to high school students (2) the principles of organization of such work by the instructor.

Mr. Credle

E. E. 41—Alternating-Current Machinery—Semester 1 (5 and 0) 5 cr.

Prerequisite: E. E. 31, 32.

Theory, design, and operating characteristics of transformers, synchronous machines, and alternating-current machinery auxiliaries.

Mr. Rhodes

E. E. 41a—Electrical Laboratory—Semester 1 (1 and 3) 2 cr.

Prerequisite: Must parallel or follow E. E. 41.

Part I. A complete experimental analysis of losses and operating characteristics of direct-current machines (continuation of E. E. 32a).

Part II. A laboratory study of the operating characteristics of (1) synchronous generator including phase connections, voltage regulation, efficiency and parallel operation (2) induction regulators and constant-current transformers.

Mr. Tingley

E. E. 42—Alternating-Current Machinery—Semester 2 (3 and 0) 3 cr.

Prerequisite: E. E. 41.

A continuation of E. E. 41 embracing polyphase induction motors, single-phase motors, synchronous converters, and alternating-current machinery controls.

Mr. Rhodes

E. E. 42a—Electrical Laboratory—Semester 2 (1 and 3) 2 cr.

Prerequisite: E. E. 41, 41a.

Continuation of E. E. 41a including a comprehensive study of single phase transformers, operating characteristics of polyphase induction motors, synchronous motors, synchronous converters, single-phase motors, and automatic magnetic and electronic control equipment.

Mr. Tingley

E. E. 43—Alternating-Current Machinery—Semester 1 (3 and 0) 3 cr.

Prerequisite: E. E. 34.

The theory and operating characteristics of transformers, synchronous generators, and motors, polyphase induction motors, single-phase motors, synchronous converters, rectifiers, and auxiliaries.

Mr. Credle

E. E. 43a—Electrical Laboratory—Semester 1 (0 and 3) 1 cr.

Prerequisite: Must parallel or follow E. E. 43.

A course paralleling E. E. 43 for the experimental determination of the characteristics of principal types of alternating-current transformers, generators, motors, converters, and controls.

Mr. Therkelsen

E. E. 44—Electric Power Transmission—Semester 2 (3 and 0) 3 cr.

Prerequisite: E. E. 41.

The electrical and economic principles of electric power transmission. A comprehensive study of line constants and losses and how they affect the regulation of the long and short electrical line; system regulations protection and stability; and efficiency of transmission of large blocks of power.

Mr. Tingley

E. E. 45—Electrical Design—Semester 1 (0 and 3) 1 cr.

Prerequisite: E. E. 31.

The application of the fundamental principles of electric and magnetic circuits through a series of design problems correlating with electrical machinery courses.

Mr. Rhodes

E. E. 46—Electrical Design—Semester 2 (0 and 3) 1 cr.

Prerequisite: E. E. 41.

A continuation of the procedure of E. E. 45, with specific application to induction motors, synchronous converters and single phase motors.

Mr. Rhodes

E. E. 47—Electronics—Semester 1 (2 and 0) 2 cr.

Prerequisite: E. E. 32 or E. E. 34.

The properties of electron tubes with particular reference to their uses in industry and in communication. Characteristics of high vacuum and gas filled diodes, high vacuum triodes and thyratrons are the principal topics. Includes steel-tank rectifiers.

MR. CREDLE

E. E. 48—RADIO COMMUNICATION—Semester 2 (2 and 0) 2 cr.

Prerequisite: E. E. 47.

The application of electron tubes to the field of communication. The use of vacuum tubes as audio frequency amplifiers, radio frequency amplifiers, detectors, and oscillators. The elements of net work theory.

MR. CREDLE

E. E. 49—ADVANCED INDIVIDUAL PROBLEM—Semester 1 or 2 (2 and 0) 2 cr.

Intended to enable a limited number of students to undertake specific projects in which they may be especially interested. The laboratories afford excellent facilities for this work.

DEPARTMENT STAFF

E. E. 50—POWER STATIONS—Semester 2 (2 and 0) 2 cr.

Prerequisite: E. E. 41 or 43.

A course covering the general subject of economic production of electrical energy and the study of typical arrangements of generating equipment in steam and in hydro-stations.

MR. RHODES

E. E. 52—ELECTRICAL DISTRIBUTION—Semester 2 (2 and 0) 2 cr.

Technical and economic features of local wiring systems; city and rural distribution; control and protective equipment. Includes reference reading and preparation of papers for class presentation.

MR. TINGLEY

E. E. 54—ILLUMINATION—Semester 2 (2 and 0) 2 cr.

Prerequisite: E. E. 41 or 43.

Fundamental principles of illumination embracing light sources; photometry; reflection and absorption; color; street, residence, industrial and commercial lighting.

Mr. Rhodes

E. E. 56—Electric Transients—Semester 2 (1 and 3) 2 cr.

Prerequisite: E. E. 32.

To enable a few of the more advanced electrical engineering students to obtain a clearer conception of the physical phenomena and mathematical analysis of electrical circuits and machines in the transient state and to verify the theory involved by means of oscillographs.

Mr. Tingley

ENGLISH

Mr. Daniel

Mr. Bradley	Mr. Taylor	Mr. Lane	Mr. Kinard
*Mr. Lucas	Mr. J. C. Green	Mr. Dean	Mr. Cox
Mr. McDowell	*Mr. Stephens	Mr. Doyle	Mr. C. B. Green

Mr. Wilburn

English 15, 16—Composition and Reading in Literature—Semesters 1 and 2 (3 and 0) 3 cr.

Purpose: To train the student in the use of correct, accurate, and effective language and to acquaint him with outstanding works of the major American authors. *Principal Topics*: Some review of principles of grammar and punctuation; principles of and practice in the various units of composition, especially the paragraph; letter writing; vocabulary; supplementary reading and classroom reports; selected works. (*Century Collegiate Handbook*—Greever and Jones; *The College Reader*—Lovett and Jones; *Practice Handbook in English*—Jones; a dictionary.)

Mr. Lane	*Mr. Lucas	*Mr. Stephens	Mr. Doyle
Mr. C. B. Green	Mr. Cox	Mr. McDowell	Mr. Brandon
	Mr. Dean	Mr. Wilburn	

English 21, 22—English Literature and Advanced Composition—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: English 15 and 16.

Purpose: To give the student a more intimate knowledge and appreciation of Nineteenth Century English literature; to cultivate his powers

*On leave 1940-1941.

of composition for accurate expression. *Principal Topics*: An intensive study of outstanding authors of the Romantic and Victorian periods of English literature; supplementary reading from the best authors; periodic themes based upon reading and other assignments; classroom discussion of themes; consultation with students for individual discussion. (*The Literature of England,* Vol. II—Watt, Wood and Anderson.)

Mr. Taylor Mr. Lane Mr. Kinard Mr. J. C. Green

*Mr. Lucas Mr. Cox Mr. McDowell

English 31—Public Speaking—Semester 1 (2 and 0) 2 cr.

Prerequisite: English 21 and 22.

Purpose: To train the student in the art of practical public speaking. *Principal Topics*: The improvement of pronunciation, enunciation, voice, and stage presence; outlining and delivery of original speeches; impromptu and extemporaneous speaking; debate; parliamentary pratice.

Mr. Bradley Mr. Kinard Mr. Lane Mr. J. C. Green

English 32—Business Law—Semester 2 (2 and 0) 2 cr.

Prerequisite: English 21 and 22.

Purpose: To fix the principles of business law in the student's mind with the view of helping him to avoid legal difficulties. *Principal Topics*: Origin and purpose of laws; contracts; agency; negotiable instruments; sales; personal and real property; cases. (*American Business Law*—Frey.)

Mr. Daniel Mr. Bradley

English 43, 44—Shakespeare—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: English 21 and 22.

Purpose: To give the student as comprehensive an acquaintance with the dramatic work of Shakespeare as possible. *Principal Topics*: A general approach to appreciation of plays from the point of view of the theater; Shakespeare's development as a dramatist; matters of character and presentation of individual plays. (A complete edition of Shakespeare's plays; *The Facts about Shakespeare*—Neilson and Thorndike.)

Mr. Taylor

*On leave 1940-1941.

ENGLISH 45—NEWS WRITING—Semester 1 (2 and 0) 2 cr.

Prerequisite: English 21 and 22.

Purpose: To give additional training in English through the project method. *Principal Topics*: Gathering the news; kinds of news stories; structure and style; lead; reporting; interviewing; reports.

ENGLISH 46—BUSINESS ENGLISH—Semester 2 (2 and 0) 2 cr.

Prerequisite: English 31 and 32.

Purpose: To give training in business customs and practices. *Principal Topics*: Business letters and forms; methods of approach; securing and conducting interviews; presenting plans and propositions; salesmanship; reports; developing a pleasing personality. (*Salesmanship*—Fernald.)

ENGLISH 47, 48—CHAUCER—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: English 21 and 22.

Purpose: To give the student familiarity with the language, verse forms, and stories of Chaucer; to cultivate a grasp of fourteenth century thought and literary motivation. *Principal Topics*: (First Semester) reading from the prologue and the Canterbury Tales with other short selections; supplementary reading from contemporary and later critical authors; term paper; (Second Semester). Detailed study of Troilus and Criseyde; term paper. (*The Works of Chaucer.*)

MR. BRADLEY

ENGLISH 49—AGRICULTURAL JOURNALISM—Semester 2 (2 and 0) 2 cr.

Prerequisite: English 21 and 22.

Purpose: To give training in the fundamentals of journalism; to apply this training to the actual writing and publishing of agricultural copy. *Principal Topics*: Introductory study of the basic principles of journalism; detailed study of agricultural news story, feature story, editorial, and miscellany; periodic publication of agricultural news stories in country weeklies; publication of at least one feature story in an agricultural journal. (*Agricultural Journalism*—Crawford and Rogers.)

MR. BRADLEY

ENGLISH 50—THESIS—Semester 1 (0 and 2) 2/3 cr.

Purpose: To give the student practice in making research and presenting the results in proper form. *Principal Topics*: Statement of the problem; object and scope of the investigation; history of the problem; possible application of results; plan of procedure. (To be prepared under the direction of a member of the School of General Science and approved as to content by him and as to form by a representative of the English department.)

MR. KINARD

ENGLISH 53, 54—INTRODUCTION TO DRAMA—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: English 21 and 22.

Purpose: To offer a systematic study of the principles and progress of drama from the time of Aeschylus to the present day. *Principal Topics*: Dramatic history and criticism, representative plays, the stage and theatrical conditions, the continental background of English drama, influence of life of the time on authors, actors and managers, written exercises in dramatic criticism, class discussions of new trends in legitimate drama and movies, controlled breathing, voice training, emotional expression, and the theory of acting. (*Introduction to Drama*—Hubbell and Beaty.)

MR. LANE

ENGLISH 57, 58—SELECTED MASTERPIECES FROM ENGLISH LITERATURE—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: English 21 and 22.

Purpose: To help students learn and appreciate a variety of literary masterpieces, selections not included in other courses at Clemson. *Principal Topics*: Selections studied vary with classes—a representative list for a semester: *Paradise Lost* (6 books); *Gulliver's Travels; Beowulf; Diary of Samuel Pepys* (selections); Boswell's *Johnson* (selections); Pope's *Iliad* (selections); *Tom Jones;* Bacon's essays; *Pilgrim's Progress.* (No general text. Cheap editions of some selections are bought.)

MR. KINARD

ENGLISH 59, 60—AMERICAN LITERATURE—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: English 21 and 22.

Purpose: To give the student a more thorough knowledge and a deeper appreciation of the literature of our country. *Principal Topics*: During the first semester a study will be made of the period before the Civil War, with special attention to Poe, Emerson, Hawthorne and Melville. During the second semester the study will be continued from Whitman to the present with emphasis upon the literature of the South.

Mr. Green

*ENTOMOLOGY**

Mr. Sherman Mr. Dunavan

Ent. 31—Introduction and Applied Entomology—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Zool. 12 or 21.

Purpose: To give agricultural students information concerning the structure, life-history, and habits of insects in general and to provide instruction in control of the principal injurious species. *Principal Topics*: Insect structure, metamorphosis, habits, characteristics of the principal orders of insects, methods of control of injurious forms. (*Applied Entomology*—Fernald.)

Mr. Sherman

Ent. 32—General Entomology—Semester 2 (2 and 4) 3 1/3 cr.

Prerequisite: Ent. 31.

Purpose: Designed especially for students who wish to choose Entomology as their life-work. The aim is to provide basic training in the general phases of Entomology. *Principal Topics*: Near relatives of insects; history of Entomology; insect metamorphosis; classification, habits, and characteristics of the members of the principal families in all orders of insects; technique of collecting and preserving insects. (*Manual for the Study of Insects*—Comstock.)

Mr. Dunavan

Ent. 41—Economic Entomology—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Ent. 31.

Purpose: To so equip the student that he will be able to recognize injurious species of insects and their damage and be able to control them

*Students who major in Entomology are required to take certain courses in Zoology which are listed under that subject. See Zoology.

intelligently. *Principal Topics*: Effect of cultivation on insect populations; peculiarities of field crops and their insect enemies; identification, life-history, and control of insect enemies of corn, wheat, oats, clover, alfalfa, peas, beans, tobacco, cotton, sugar cane, stored grain, cattle, horses, sheep, swine, poultry, and man. (*Destructive and Useful Insects*—Metcalf and Flint.)

MR. DUNAVAN

ENT. 42—ECONOMIC ENTOMOLOGY—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Ent. 31.

Purpose: To train students in the recognition of fruit and vegetable insects and in methods of control of these pests. *Principal Topics*: Beneficial insects, history of insect control, host resistance, theory of insect control, chemistry and preparation of common insecticides, special requirements of control of fruit and vegetable insects, identification, life histories, and control of insect enemies of apples, pears, peaches, plums, cherries, grapes, bush fruits, strawberries, and all vegetable crops. (*Destructive and Useful Insects*—Metcalf and Flint.)

MR. DUNAVAN

ENT. 44—BEEKEEPING—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Ent. 31.

Purpose: To provide the student with the knowledge and actual practice of modern beekeeping which will enable him to become a successful beekeeper. *Principal Topics*: Activities of the colony, life-history and metamorphosis of bees; spring, fall and winter management; enemies of bees, swarm control, production of honey, methods of wintering. (*ABC and XYZ of Beekeeping*—Root.)

MR. DUNAVAN

ENT. 45—INSECT MORPHOLOGY—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Ent. 31 and 32.

Purpose: Designed especially for students majoring in Entomology. The aim is to give the student detailed knowledge of the external and internal morphology of insects. *Principal Topics*: Structure of the insect head, thorax, abdomen, and body appendages, structure of muscles, external and internal skeleton, alimentary canal, reproductive, respiratory, and nervous systems, structure and function of glands and sense organs, physiology of respiration and digestion. (*Introduction to Entomology*—Comstock; Laboratory: *Anatomy of Insects*—Comstock & Kellogg.)

MR. DUNAVAN

ENT. 46—SYSTEMATIC ENTOMOLOGY—Semester 2 (1 and 4) 2 1/3 cr.

Prerequisite: Ent. 31 and 32.

Purpose: To give students specializing in Entomology training in identification of insects by the use of keys. *Principal Topics*: Theory of nomenclature, philology of scientific names, important taxonomists of the past and present, detailed taxonomic study of selected groups of insects.

MR. SHERMAN

ENT. 47—PARASITOLOGY—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Zoology 12 or 21 and Entomology 31.

Purpose: To give technical training in Human Parasitology. Special emphasis is placed on life-cycles of parasites and on identification of the insect carriers and transmitters of parasites. *Principal Topics*: Protozoa, flukes, tapeworms, roundworms, medical entomology.

MR. DUNAVAN

ENT. 51 and 52—SEMINAR—Semesters 1 and 2 (1 and 0) 1 cr.

Prerequisite: Ent. 31 and 32.

Purpose: To train students specializing in Entomology in presenting short talks on scientific topics. To present miscellaneous information not given in regular courses but of value to professional Entomologists. *Principal Topics*: Study of various technical journals, lives of famous Entomologists, tropisms of animals, insect ecology.

MR. DUNAVAN and other staff members.

ENT. 59—INTRODUCTION TO RESEARCH—Semester 1 (1 and 2) 1 2/3 cr.

Prerequisite: Ent. 31 and 32.

Purpose: To familiarize the student with research methods in Entomology and to enable each student to gather data and write a graduation thesis. *Principal Topics*: Outlining a problem in research, bibliographic methods, graphic presentation of data, reviews of published papers on entomological technique, practical photography.

MR. DUNAVAN

FRENCH

MR. RHYNE MR. DEAN

FRENCH 11, 12—BEGINNER'S FRENCH—Semesters 1 and 2 (3 and 0) 3 cr.

Purpose: To provide the student with a foundation upon which, by subsequent work, he can build up a reading knowledge of French. *Principal Topics*: The fundamentals of grammar with emphasis on pronunciation and the learning of idioms, conversation and dictation. In the second semester a reader will be used.

MR. RHYNE MR. DEAN

FRENCH 21, 22—SECOND-YEAR FRENCH—Semesters 1 and 2 (3 and 0) 3 cr.

Purpose: To help the student acquire a reading knowledge of French, to appreciate some of the beauties of French literature, and to read scientific books. *Principal Topics*: Review of grammar, with especial attention to irregular verbs; conversation and dictation continued, prose readings from such authors as Balzac, Daudet, Dumas, Hugo, Loti, Maupassant and Merimee.

MR. RHYNE

FRENCH 31, 32—THIRD-YEAR FRENCH—Semesters 1 and 2 (2 and 0) 2 cr.

A course in rapid reading of literary or scientific prose.

MR. RHYNE

GEOLOGY AND MINERALOGY

MR. CALHOUN MR. GEE

GEOL. 21—AGRICULTURAL GEOLOGY—Semester 1 (3 and 0) 3 cr.

Purpose: In this course the student is shown the relationships existing between geology and practical agricultural problems, especially those in connection with soil formation and adaptation. *Principal Topics*: Soil making minerals and rocks; formation of soils from rocks; the question of the relation of underground water to springs, wells, and artesian wells; drainage problems and soil water are considered. The soil series are taken up with relation to the rocks from which they are derived and the geologic agents which aid in their formation. (*Agricultural Geology*—Emerson.)

MR. CALHOUN

GEOL. 23, 24—GENERAL GEOLOGY—Semesters 1 and 2 (3 and 0) 3 cr.

Purpose: To familiarize students with geology as applied not only to a thorough enjoyment of nature, but also to its many practical applications. *Principal Topics*: These courses emphasize topographic forms and their origin. The earth is considered first as a member of the solar system, and from this the evolution of the earth through all of its changes to the geography and life of the present day is traced. Special attention is given to the study of topographic and geologic maps (*Outlines of Geology*—Longwell, Knopf, Flint, Schuchert & Dunbar.)

MR. GEE

GEOL. 33, 34—MINERALOGY—Semesters 1 and 2 (2 and 2) 2 2/3 cr.

Prerequisite: Gen. Chem. 33.

Purpose: The first semester of this course will be the same as that described under Gen. Chem. 33. The purpose is to give the students a comprehensive knowledge of crystallography so that during the second semester they can carry on work in chemical microscopy if they so desire. Geology 34, Mineralogy, will be open to those students who wish to elect descriptive and determinative mineralogy. (Textbook, Kraus, Hunt, and Ramsdell.)

MR. CALHOUN

GEOL. 42—METEOROLOGY—Semester 2 (2 and 0) 2 cr.

Purpose: A course designed to give the general principles of meteorology and climatology as applied to farming, aviation, and to those sciences which require a knowledge of such principles. *Principal Topics*: The course concerns itself in detail with those elements which control the weather, such as temperature, pressure, wind, humidity, clouds, and precipitation. The study of weather maps and conclusions to be drawn from them are made an important part of the course. (*Meteorology*—Milham.)

MR. CALHOUN

GEOL. 43—ENGINEERING GEOLOGY—Semester 1 (2 and 0) 2 cr.

Purpose: To show the practical application of geology to problems of engineering. *Principal Topics*: Materials from the earth's crust which the engineer must use; structural geology which gives an idea how such material is arranged; dynamic geology which emphasizes both those forces which tear the earth down and those which build it up. Topographic and geologic maps are used extensively in connection with the text. (*Elements of Engineering Geology*—Ries and Watson.)

MR. CALHOUN

GERMAN

Mr. Rhyne
Mr. Mueller

German 11, 12—Beginner's German—Semesters 1 and 2 (3 and 0) 3 cr.

Purpose: To provide the student with a foundation upon which, by subsequent work, he can attain a reading knowledge of German. *Principal Topics*: The essentials of German grammar. Stress is laid on pronunciation, conversation, and drill in the fundamental constructions. Dictation is given throughout the year. In the second semester an elementary reader is used.

Mr. Rhyne

German 21, 22—Second-year German—Semesters 1 and 2 (3 and 0) 3 cr.

Purpose: To help the student to build up a reading knowledge of German, to appreciate some of the beauties of German literature, and to read scientific books. *Principal Topics*: Review of grammar; conversation and dictation continued; easy lectures in German; prose readings from such authors as Baumbach, Freytag, Hauff, Storm, and Wildenbruch.

Mr. Rhyne

German 31, 32—Third-year German—Semesters 1 and 2 (2 and 0) 2 cr.

A course of rapid reading of literary or scientific prose.

Mr. Rhyne

GOVERNMENT

Mr. Ward
*Mr. Gates Mr. Epting Mr. Crouch
Mr. Walker **Mr. Hodges

Gov. 12—American National Government—Semester 1 or 2 (2 and 0) 2 cr.

Purpose: To acquaint the student with the system of American Federal Government. *Principal Topics*: The Constitution, Senate, House of Representatives, joint congressional activities, powers of Congress, President, executive departments, independent establishments, Judiciary, relation to the states and territories, citizenship, international relations, political parties.

---

*On leave 1940-1941.

**In place of Mr. Gates on leave.

*Mr. Gates **Mr. Hodges Mr. Epting Mr. Walker

Gov. 31—American Government and Political Parties—Semester 1 (3 and 0) 3 cr.

Not open to those who have had Government 12.

Purpose: To give the student a broad survey of the principles and practices of American government. *Principal Topics*: The Constitution, citizenship and suffrage, political parties, the national executive, the Congress, the national judiciary.

Gov. 32—State and Local Government—Semester 2 (3 and 0) 3 cr.

Prerequisite: Government 12 or 31 and permission of the instructor.

Purpose: To familiarize the student with the way in which government is carried on by agencies other than the national government. *Principal Topics*: The place of the state in the nation, state and local administration, taxation, economic and social functions, county and municipal government, governmental problems in South Carolina.

Mr. Epting

Gov. 43—International Relations—Semesters 1 and 2 (2 and 0) 2 cr.

Open only to Seniors.

Purpose: To acquaint the student with current world movements and conditions, so that he may be able to think intelligently on the problems confronting our nation. *Principal Topics*: Economic, political and social problems.

Mr. Crouch

Gov. 44—Comparative Government—Semester 2 (3 and 0) 3 cr.

Prerequisite: Government 12 and permission of the instructor.

Purpose: To acquaint the student with a few of the more important governmental systems of the world. *Principal Topics*: Historical development of present-day political institutions; current phases of governmental practice and policy, especially in Great Britian, Germany, Italy, and Russia.

*Mr. Gates **Mr. Hodges

---

*On leave 1940-1941.

**In place of Mr. Gates on leave.

HISTORY

MR. HOLMES
MR. EPTING MR. WALKER

HISTORY 14—AMERICAN ECONOMIC HISTORY—Semester 1 or 2 (2 and 0) 2 cr.

Purpose: To teach the student to think in terms of economic and social forces. *Principal Topics*: Commercial Revolution of Europe of the fifteenth century, colonization, mercantilism, industrial revolution, economic aspects of the several American wars, the westward movement, transportation, rise of labor, decline of laissez faire, recent agricultural development. (*A History of American Economic Life*—Kirkland.)

MR. HOLMES MR. EPTING MR. WALKER

HISTORY 31, 32—HISTORY OF CIVILIZATION—Semesters 1 and 2 (3 and 0) 3 cr.

Prerequisite: Open only to Juniors and Seniors.

Purpose: To inform the student in a general way of all the outstanding civilizations of the past. *Principal Topics*: Egypt with its monuments and religion; Babylonian law and commerce; Aegean culture, introduction of the horse, iron, and Indo-European literature; Hellenic and Hellenistic cultures: art, literature, philosophy, science; Roman law, expansion, and civilization; the feudal system; medieval art; rise of modern states and capitalism; Age of Louis XIV; Age of Reason; modern science, industry and art.

MR. HOLMES

HISTORY 42—THE DEVELOPMENT OF SOUTH CAROLINA—Semester 2 (2 and 0) 2 cr.

Prerequisite: Permission of the instructor.

Purpose: To acquaint the student with the principal social and economic factors that have influenced the growth of the State. *Principal Topics*: Land disposal, systems of labor, racial and cultural groups, agriculture, industry, education, religion, social conflicts.

MR. HOLMES

HORTICULTURE

MR. MUSSER
MR. NEWMAN MR. EDMOND MR. BRIGHTWELL

HORT. 22—GENERAL HORTICULTURE—Semesters 1 and 2 (2 and 3) 3 cr.

Purpose: To give the student training which will enable him to apply the fundamentals of plant growth to the growth and development of horticultural crops, with particular emphasis on the home orchard, home garden, and home beautification. *Principal Topics*: A review of fundamental plant processes and plant structures. The influence of temperature, light, water, and nutrients on vegetation and reproduction. A study of principal horticultural practices, including seedage, propagation, sites and soils, fertilization, plant growing, cultivating, harvesting, storing, marketing, and pest control. A study of principal horticultural crops, including the fruit crops—their fruiting habits, training, pruning, and spraying; the vegetable crops, including their growth habits and methods for successful production; and the ornamental crops, including their place, selection, and arrangement in the home. (*General Horticulture*—Edmond, Andrews, and Musser.)

MR. MUSSER MR. BRIGHTWELL

HORT. 31—PLANT PROPAGATION AND NURSERY MANAGEMENT—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Hort. 22.

Purpose: To give the student a thorough knowledge of the methods of managing a commercial nursery and propagating plants of all kinds. *Principal Topics*: Methods of propagation; time, manner, and material for making cuttings, temperature and media for rooting cuttings of ornamental trees, shrubs and flowering plants; propagating structures, soils, fertilizers, and management methods for commercial nurseries. Practical instruction given in field and greenhouse. (*The Modern Nursery*—Laurie and Chadwick.)

MR. NEWMAN

HORT. 32—ELEMENTARY LANDSCAPE DESIGN—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Hort. 31.

Purpose: To give the student a practical course in general landscape gardening, a thorough knowledge of plant materials used in landscape designing. *Principal Topics*: Kinds of landscape gardens, principles of landscape art, improvement of home, school grounds, and park areas; mapping, designing, identification, an adaptation of decorative plants to landscape work. (Assigned references.)

MR. NEWMAN

HORT. 33—THE PRODUCTION OF HORTICULTURAL CROPS—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Hort. 22.

Purpose: To give the student majoring in horticulture additional training in the fundamentals of plant growth and their application to the growth and development of horticultural crops. *Principal Topics*: A comprehensive study of the photosynthesis, respiration, nutrition, and water relations of horticultural crops; the physiological and biochemical uses of horticultural plant products; and of the influence of the environment on growth and differentiation. (Assigned references.)

Mr. Edmond

Hort. 41—Systematic Pomology and Small Fruit Culture—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Hort. 22.

Part I—Systematic Pomology.

Purpose: To acquaint students with the many and varied characters of deciduous and citrus fruits, both plant and fruit; to classify and identify varieties. *Principal Topics*: The structure of fruit plants—roots, stems, leaves, flowers, fruit, etc.; physiological characters; methods of work in systematic pomology and of classification; habitat, history, color, form, structure, flavor and use of pome, drupe, bramble and heath fruits, grapes, strawberries, currants and gooseberries, and various citrus fruits; judging and displaying fruits. (*Systematic Pomology* —Hedrick.)

Part II—Small Fruit Culture.

Purpose: To give the student a knowledge of the principles of production and preparation for market of small fruits. *Principal Topics*: Varieties, soils, sites, culture, fertilizers, harvesting, and preparation for marketing of grapes, strawberries, dewberries, blackberries, raspberries, and other small fruits. (*Small Fruits*—Shoemaker.)

Mr. Musser

and 2) 2 2/3 cr.

Purpose: To train the student to apply the principles of genetics to the improvement of horticultural crop plants. *Principal Topics*: Genetics and breeding practices; the technique of selection, varietal and species crossing, sterility, and incompatability, mutations and chimeras; the origin of new forms. (Assigned References.)

Mr. Edmond

---

*Hort. 43 and Hort. 47 are given in alternate years. Hort 47 will be offered in 1941-1942.

HORT. 45—LANDSCAPE DESIGN—Semester 1 (1 and 3) 2 cr.

Prerequisite: Hort. 31.

Purpose: To familiarize the student with plant materials used in landscape designing for home grounds, parks, and small estates. *Principal Topics*: Systematic study of trees, shrubs, and herbaceous plants used on landscape designs; practical problems to be worked with the same attention to details as is necessary in actual practice of landscape designing.

MR. NEWMAN

HORT. 46—ADVANCED LANDSCAPE DESIGN—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Hort. 31, 32, and 45.

Purpose: To prepare the student to engage in Landscape Designing as a profession. *Principal Topics*: Classification of trees, shrubs and flowering plants with special reference to their use in landscape designing; soils, manures and fertilizers; establishing and maintaining lawns on large estates; vines and other ground covers; detail estimates of cost of developing large landscape problems; advanced design. (Assigned references.)

MR. NEWMAN

*HORT. 47—NUT CULTURE AND SPRAYS AND SPRAYING—Semester 1 (2 and 2) 2 2/3 cr.

PART I—NUT CULTURE

Purpose: To give the student a knowledge of the principles of production and preparation for market of the principal nut crops. *Principal Topics*: Propagation, varieties, soils, sites, cultural methods, pollination problems, fertilizers, harvesting, and grading of pecans, walnuts, filberts, and almonds. (Assigned references.)

PART II—SPRAYS AND SPRAYING.

Purpose: To give the students a working knowledge of the properties and application of fungicides and insecticides in the control of pests of horticultural crops. *Principal Topics*: Classes of fungicides and insecticides; their properties, effectiveness, influence on plant functions, costs, and the methods of application. (References.)

MR. BRIGHTWELL

---

*Hort. 43 and 47 are given in alternate years. Hort 47 will be offered in 1941-1942.

HORT. 52—COMMERCIAL POMOLOGY—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Hort. 22.

Purpose: To give the students a knowledge of the methods of establishing and managing a large fruit orchard. *Principal Topics*: Fruit bud formation, rest period, and water responses of fruit plants; fruit tree soils; fruit setting and self-unfruitfulness of the important fruits; orchard soil management and responses of various fruits to applications of fertilizers; fundamental principles of and response of fruit trees to pruning; effect of climatic differences; freezing of tissues and means of avoiding injury; harvesting, transportation, storage. (*Fundamentals of Fruit Production*—Gardner, Bradford and Hooker; *Orchard and Small Fruits*—Auchter and Knapp.)

MR. MUSSER

HORT. 54—TRUCK CROPS—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Hort. 22.

Purpose: To give the student a thorough knowledge of the truck industry with special reference to growing and marketing truck crops along the Atlantic coast. *Principal Topics*: Plant characteristics, varieties, soils, fertilizers, cover crops, water requirements, harvesting and preparation for market of asparagus, beans, cabbage, Irish potatoes, sweet potatoes, cantaloupes, watermelons, tomatoes, and various less important crops. (*Southern Vegetable Crops*—Ware; Assigned References.)

MR. EDMOND

HORT. 56—LANDSCAPE DESIGN—Semester 2 (1 and 3) 2 cr.

Prerequisite: Hort. 31, 43.

Purpose: To give the student a thorough knowledge of and practical experience in landscape problems of large areas. *Principal Topics*: Civic improvements, mill villages, public buildings, squares, parks, storm water control, water courses, lakes, lawns, drives, and walks; trees and shrubs and their requirements; study of finished problems in Landscape Design, original problems, field work, and drafting.

MR. NEWMAN

HORT. 61-62—SPECIAL PROBLEMS—Semesters 1 and 2 (1 and 0) 1 cr.

Purpose: To give experience in interpreting and analyzing reports of recent horticultural investigations. *Principal Topics*: Recent research work on various phases of horticulture, methods of conducting investigations, preparation of report of investigations. (Assigned References from various sources.)

MR. MUSSER AND HORTICULTURE STAFF

MATHEMATICS

Mr. Martin
Mr. Hunter Mr. Sheldon Mr. Burton Mr. Edwards
Mr. Coker Mr. Bell Mr. Kirkwood Mr. Kelly Mr. Miller
Mr. Brewster Mr. Stapp

Math. 11—Plane Trigonometry—Semester 1 or 2 (3 and 0) 3 cr.

Prerequisite: Algebra and Plane Geometry.

Purpose: To give the student a thorough knowledge of the principles of plane trigonometry together with its various applications to related problems and exercises. *Principal Topics*: Trigonometric functions of an acute angle, reciprocal functions, functions of complementary angles, fundamental relations between the function, functions of any angle; the right triangle; solutions of problems in heights and distances, projections, forces, velocities, and accelerations, isosceles triangles, polygons, and related circles; oblique triangles, laws of sines, cosines, and tangents with their various applications in the solution of triangles; the functions of the sum and difference of two angles, the double angle, and the half angle; inverse functions and trigonometric equations. (*Plane Trigonometry*—Patterson and Hickson.)

Mr. Hunter Mr. Sheldon Mr. Burton Mr. Edwards
Mr. Coker Mr. Bell Mr. Kirkwood Mr. Kelly Mr. Miller

Math. 12—Analytic Geometry—Semester 1 or 2 (3 and 0) 3 cr.

Purpose: To give the student a basic knowledge of the relations between curves and their equations. *Principal Topics*: Cartesian coordinates, curves and curve plotting, the straight line, the circle, polar coordinates, the parabola, the ellipse, the hyperbola. (*Analytic Geometry*—Love.)

Mr. Hunter Mr. Sheldon Mr. Burton Mr. Edwards
Mr. Coker Mr. Bell Mr. Kirkwood Mr. Kelly
Mr. Miller Mr. Brewster Mr. Stapp

Math. 13, 14—College Algebra—Semesters 1 and 2 (2 and 0) 2 cr.

Purpose: To give the student a knowledge of the fundamental principles of Algebra. *Principal Topics*: Fundamental operations, special products and factoring, fractions, radicals, logarithms, quadratic equations, ratio and proportion, variation, binomial theorem, complex numbers, partial fractions, determinants. (*College Algebra*—Rosenbach and Whitman.)

Mr. Hunter	Mr. Sheldon	Mr. Burton	Mr. Edwards
Mr. Coker	Mr. Bell	Mr. Kirkwood	Mr. Kelly
Mr. Miller	Mr. Brewster	Mr. Stapp	

Math. 15—College Algebra—Semester 1 (3 and 0) 3 cr.

Purpose: To give the student a knowledge of the fundamental principles of Algebra. *Principal Topics*: Fundamental operations, factoring, fractions, functions and their graphs, linear equations, exponents, radicals, logarithms, quadratic equations, ratio and proportion, determinants. (*College Algebra*—Rosenbach and Whitman.)

Mr. Hunter	Mr. Sheldon	Mr. Burton	Mr. Edwards
Mr. Coker	Mr. Bell	Mr. Kirkwood	Mr. Kelly
Mr. Miller	Mr. Brewster	Mr. Stapp	

Math. 19—Applied Mathematics—Semester 1 or 2 (3 and 0) 3 cr.

Purpose: To equip prospective teachers of agriculture with the mathematical skills needed in solving problems of agriculture as dealt with on the farm and to interpret and understand the mathematical terms in agricultural textbooks, experiment station, U. S. D. A., and U. S. Office of Education bulletins and reports. *Principal Topics*: Areas, volumes, percentages, averages, linear equations in one unknown, ratio and proportion, trigonometry, concrete work, lumber measure, stored volumes of grain, silage, and other farm products, excavations and calculations relating to farm structures. Some attention will be given to the mathematical language for interpreting economic data.

Mr. Sheldon

Math. 21, 22—The Calculus—Semester 1 and 2 (5 and 0) 5 cr.

Prerequisite: Math. 11, 12, 13, 14.

Purpose: To give the student a knowledge of the Calculus and its applications. *Principal Topics*: Differentiation of the elementary functions, applications of differentiation to rate and maxima and minima problems. Integration of the elementary functions, applications of integration to areas, volumes, and surfaces. (*The Calculus*—Granville, Smith and Longley.)

Mr. Martin	Mr. Hunter	Mr. Sheldon	Mr. Burton
Mr. Edwards		Mr. Coker	

Math. 23—Differential Calculus—Semester 1 (3 and 0) 3 cr.

Prerequisite: Mathematics 11, 12, 13, 14.

Purpose: To give those students taking the textile course the fundamental principles of differential calculus and some of its important applications. *Principal Topics*: Differentiation of algebraic and transcendental functions, with numerous applications in maxima and minima, curve tracing, and velocity and acceleration.

MR. SHELDON MR. EDWARDS MR. COKER MR. BELL
MR. KELLY MR. KIRKWOOD

MATH. 24—INTEGRAL CALCULUS—Semester 2 (3 and 0) 3 cr.

Prerequisite: Mathematics 23.

Purpose: To drill the student in fundamental principles and applications of integral calculus. *Principal Topics*: A study of the elementary form of integration, integration of rational fractions, the definite integral, geometric applications, multiple integrals, and practical problems arising in engineering subjects. (*The Calculus*—Granville, Smith, Longley.)

MR. SHELDON MR. EDWARDS MR. COKER MR. BELL
MR. KELLY MR. KIRKWOOD

MATH. 25, 26—INDUSTRIAL MATHEMATICS—Semesters 1 and 2 (3 and 0) 3 cr.

For education students only.

Purpose: To emphasize the practical side of Arithmetic, Geometry, Algebra, and Trigonometry. *Principal Topics*: Stress is to be placed upon the working of a great many problems from carpentry, the machine shop, construction work, surveying, and allied subjects, in order to obtain proficiency in carrying out a mathematical calculation and achieving the correct result. (*Practical Mathematics*—Palmer.)

MR. BURTON

MATH. 27, 28—THE CALCULUS—Semester 1 (5 and 0) 5 cr. Semester 2 (3 and 0) 3 cr.

Purpose: To give the student a knowledge of the calculus and its applications. *Principal Topics*: Differentiation and integration of the elementary functions. Applications of differentiation to rates, maxima and minima, and approximations. Applications of integration to area, volume, and surface problems. (*The Calculus*—Granville, Smith, and Longley.)

MR. MARTIN MR. HUNTER MR. SHELDON

MATH. 32—ORDINARY DIFFERENTIAL EQUATIONS—Semester 2 (2 and 0) 2 cr.

Purpose: To give the student a knowledge of the methods used in the solution of ordinary differential equations. *Principal Topics*: Homogeneous equations, linear equations, equations reducible to the linear form.

special type equations, second order equations, nth order equations, applications to mechanics, physics and chemistry.

Mr. Martin Mr. Hunter Mr. Sheldon

MECHANICAL ENGINEERING

Mr. Earle

Mr. Fernow Mr. Curtis Mr. Sams Mr. Shenk Mr. Freeman
Mr. Marshall Mr. Philpot Mr. Downs Mr. Watson Mr. Wachter
Mr. Ambrose Mr. McMakin

M. E. 12—Forge and Foundry—Semester 1 or 2 (0 and 6) 2 cr.

Purpose: To give the student a knowledge of the methods of making iron and steel forgings for use in industry and the methods and practices in the making of ferrous and non-ferrous castings. A study of forge equipment; materials used in forgings; selection of materials; methods of working and treating, inspection and classification of forgings. Part of the time is devoted to the study of tool steel forgings. A study of materials used in castings, the cupola, moulding sands, cores, patterns, the crucible furnace, the cleaning and inspection of castings. Time is also given to the study of the foundry from an industrial standpoint. Lectures and demonstrations accompany the work.

Mr. Philpot

M. E. 15—Woodwork—Semester 1 or 2 (0 and 2) 2/3 cr.

Purpose: A short course in woodwork consisting of lectures and shop practice for textile students. *Principal Topics*: Hand tools, sharpening tools, planing and squaring to dimensions, construction of common joints, gluing, and clamping.

Mr. Marshall

M. E 17—Woodwork and Pattern Making—Semester 1 or 2 (0 and 6) 2 cr.

Purpose: To give Engineering students a knowledge of the tools and machinery used in woodwork and pattern making. This is accomplished through lectures and shop practice. *Principal Topics*: Hand tools, machine tools on planing and squaring to dimensions, common joints, miscellaneous constructions, gluing and clamping, wood turning and finishing, kinds of wood for various uses, source of supply, determination of types of patterns by the equipment of foundry and machine shop. Allowances and their effect on patterns, tools used, templets, core prints, pattern construction, core box and cores, skeleton patterns. (*Woodwork and Pattern Making*—Marshall.)

Mr. Marshall

M. E. 21—Metallurgy—Semester 1 or 2 (2 and 0) 2 cr.

Prerequisite: Gen. Chem. 11 and 12 and M. E. 12; *Suggested*: One year of Physics.

Purpose: To give the student an elementary knowledge of the metallurgy of iron and steel. *Principal Topics*: A study of ores and their sources; fluxes and heating mediums; the operation of the blast furnace; the open hearth, the Bessemer Converter; the crucible furnace; a study of the various alloys of iron, their production, and use. Some time is given to commercial processes of production. (Text to be selected.)

Mr. Philpot

M. E. 22—Materials of Engineering—Semester 1 or 2 (2 and 0) 2 cr.

Purpose: To give a brief but complete study of the materials used in engineering and industry. *Principal Topics*: The sources of materials used in industry; a study of wood, concrete, ferrous alloys, non-ferrous materials, brick, tile, and other building materials. This course is designed to help the engineer to select the proper material for any given job. (Text to be selected.)

Mr. Philpot

M. E. 23, 24—Machine Shop—Semesters 1 and 2 (0 and 3) 1 cr.

Prerequisite: Trigonometry, Mechanical Drawing.

Purpose: To give the student a practical knowledge of machine shop methods from the standpoint of the industrial engineer. *Principal Topics*: General application of bench tools; design, application, and methods employed with the lathe, drill, shaper, planer, milling machine, and grinder; study of highly specialized machinery in speed production work and study; practice in industrial management.

Mr. Freeman

M. E. 25—Engineering Problems—Semester 1 or 2 (0 and 3) 1 cr.

Prerequisite: Math. 11, 12, 13, 14.

Purpose: To familiarize the student with simple problems of an engineering nature and to review applications of logarithms, trigonometric functions, parabolas, logarithmic plotting, steam tables and use of the slide rule.

Mr. Shenk Mr. Downs

M. E. 30—Theory and Practice of Welding—Semester 2 (1 and 3) 2 cr.

Prerequisite: M. E. 12.

Purpose: To give the student a knowledge of the theory of welding and enough practice to familiarize him with the equipment used for weld-

ing in industry. *Principal Topics*: The identification and weldability of metals; study of the equipment used; safe practices; welding materials and supplies; pre-treatment and after-treatment of welds; jigs and fixtures; inspection and testing; the cost of welding.

MR. PHILPOT

M. E. 31—MECHANICS (Statics)—Semester 1 (3 and 0) 3 cr.

Prerequisite: Math 21 and 22 or 27 and 28; Physics 21 and 22.

Purpose: To give the students additional training in analysis. *Principal Topics*: Analytical methods of solution of statically determinate force systems, with application to engineering; study of center of gravity and moment of inertia of areas. (*Engineering Mechanics*—Fairman and Cutshall.)

MR. CURTIS MR. WACHTER

M. E. 31.5—MECHANICS (Statics)—Semester 1 (3 and 0) 3 cr.

Prerequisite: Math 21 or 23, Physics 11 and 12 or 21 and 22.

Purpose: To train the student in analysis. *Principal Topics*: Analytical methods of solution of statically determinate force systems; study of the center of gravity; brief consideration of moment of inertia of areas. (*Engineering Mechanics*—Fairman and Cutshall.)

MR. WACHTER

M. E. 32—MECHANICS (Kinetics)—Semester 2 (3 and 0) 3 cr.

Prerequisite: M. E. 31.

Continuation of Course M. E. 31.

Principal Topics: Study of various types of motion, work, energy, and power, with engineering applications. (*Engineering Mechanics*—Fairman and Cutshall.)

MR. CURTIS MR. WACHTER

M. E. 33—MECHANICAL ENGINEERING—Semester 1 (3 and 0) 3 cr.

Prerequisite: Math. 21, 22; Physics 21, 22 or 11, 12.

Purpose: A general course to familiarize the student with mechanical equipment and its application to the needs of the civil engineer. *Principal Topics*: Study of fuels, combustion, steam, boilers and auxiliaries, steam engines, gas engines and elementary thermodynamics of the steam and gas cycles.

MR. SHENK

M. E. 33a—Mechanical Laboratory—Semester 1 (0 and 2) 2/3 cr.

Prerequisite: Physics 21, 22 or 11, 12.

Purpose: Calibration of instruments, tests of fuels, steam engines, and gas engines. *Principal Topics*: Calibration of gauges, study of indicators, tests of coal, lubricating oils, boilers, turbines, steam engines, and gas engines.

Mr. Shenk Mr. Downs

M. E. 34—Mechanical Engineering—Semester 2 (3 and 0) 3 cr.

Prerequisite: Math. 21, 22; Physics 21, 22 or 11, 12.

Purpose: A general course to familiarize the student with mechanical equipment and its application to the needs of the textile engineer. *Principal Topics*: Study of fuels, steam boilers, and auxiliaries, steam and gas engines, and elementary thermodynamics of the steam and gas cycles.

Mr. Shenk

M. E. 34a—Mechanical Laboratory—Semester 2 (0 and 2) 2/3 cr.

Prerequisite: Physics 21, 22 or 11, 12.

Purpose: Calibration of instruments, tests of fuels, steam engines, and gas engines. *Principal Topics*: Calibration of gauges, study of indicators, tests of coal, lubricating oils, boilers, turbines, steam engines, and gas engines.

Mr. Shenk Mr. Downs

M. E. 35—Power Plants—Semester 2 (3 and 0) 3 cr.

Prerequisite: Math. 21, 22; Physics 21, 22.

Purpose: A study of mechanical equipment and its application in central station and industrial uses, stress being laid on the thermodynamic feasibility of its use. *Principal Topics*: Fuels, combustion, steam boilers, boiler room auxiliaries, steam engines, and turbines with their auxiliaries.

Mr. Earle Mr. Sams

M. E. 35a—Mechanical Laboratory—Semester 1 (0 and 3) 1 cr.

Prerequisite: M. E. 35 or registration in M. E. 35.

Purpose: To familiarize the student with the instruments used and method of making friction tests on engines. *Principal Topics*: Calibration of gauges, thermometers, study of indicators, analyses of coal gas, lubricating oils, and simple engine tests.

Mr. Shenk Mr. Downs

M. E. 36—Thermodynamics—Semester 1 (3 and 0) 3 cr.

Prerequisite: M. E. 35.

Purpose: A thorough study of the thermodynamics of steam, air heat, and refrigeration cycles. *Principal Topics*: Thermodynamic principles and definitions, properties and processes for gases, cycles of heat engines using gas, properties and thermodynamic processes of vapors, vapor cycles, flow of fluids, thermodynamics of refrigeration and compressed air cycles.

Mr. Earle Mr. Sams

M. E. 36a—Mechanical Laboratory—Semester 2 (0 and 3) 1 cr.

Prerequisite: Physics 21, 22; M. E. 35a.

Purpose: A continuation of M. E. 35a. *Principal Topics*: Friction tests and economy tests of steam and gas engines.

Mr. Shenk Mr. Downs

M. E. 36b—Mechanical Laboratory—Semester 2 (0 and 3) 1 cr.

Prerequisite: M. E. 35 or registration in M. E. 35.

Purpose: To familiarize the student with mechanical equipment and the methods used in testing it. *Principal Topics*: Calibration of instruments, analyses of coal and lubricating oils, simple tests on steam and gas engines.

Mr. Shenk Mr. Downs

M. E. 38—Industrial Engineering—Semester 2 (2 and 0) 2 cr.

Prerequisite: M. E. 23, 24.

Purpose: To give the student a practical knowledge of the organization, management, and operation of the industrial plant. *Principal Topics*: Basic principles, design of the plant, organizing the company. Executive control, operating methods.

Mr. Freeman

M. E. 41—Power Plants—Semester 1 (2 and 0) 2 cr.

Prerequisite: M. E. 35, 36.

Purpose: To study the engineering of power plants. *Principal Topics*: The design and operating characteristics of power plants and of the individual units which make up the power plant, including the economics; steam, hydro, and Diesel plants.

Mr. Shenk

M. E. 41a—Power Plant Laboratory—Semester 1 (0 and 3) 1 cr.

Prerequisite: M. E. 35, 36, and 36b.

Purpose: To put into practice the theory covered in M. E. 41. *Principal Topics*: Tests of turbines, engines, pumps, compressors, boilers, blowers, etc., (with formal written reports).

Mr. Fernow

M. E. 42—Hydraulics—Semester 2 (3 and 0) 3 cr.

Prerequisite: M. E. 32.

Purpose: To familiarize students with forces exerted by water and the flow of water. *Principal Topics*: Theoretical study of pressure measurement, hydrostatic pressures, discharge measuring devices, flow in pipes and open channels; brief consideration of hydrodynamics, hydraulic turbines, and hydraulic power plants. (*Hydraulics*—Schoder and Dawson.)

Mr. Curtis Mr. Wachter

M. E. 42a—Hydraulic Laboratory—Semester 2 (0 and 2) 2/3 cr.

To accompany M. E. 42.

Purpose: Experimental illustration by students of certain devices and principles studied in M. E. 42 or C. E. 49; also a limited number of exercises on testing of structural materials.

Mr. Curtis Mr. Wachter

M. E. 42.5—Hydraulics—Semester 2 (2 and 0) 2 cr.

Prerequisite: M. E. 32.

An abbreviated form of M. E. 42 without laboratory.

Mr. Curtis Mr. Wachter

M. E. 43—Power Plants—Semester 1 (3 and 0) 3 cr.

Prerequisite: M. E. 35, 36.

The same as M. E. 41, but more complete and detailed. (*Power Plant Engineering*—F. T. Morse.)

Mr. Fernow

M. E. 43a—Power Plant Laboratory—Semester 1 (0 and 4) 1 1/3 cr.

Prerequisite: M. E. 35a, 36a and registration in M. E. 43.

An amplification of M. E. 41a. (No text.)

Mr. Sams

M. E. 44—Power Plants—Semester 2 (3 and 0) 3 cr.

Prerequisite: M. E. 43.

A continuation of M. E. 43. (*Power Plant Engineering*—F. T. Morse.)

Mr. Fernow

M. E. 44a—Power Plant Laboratory—Semester 2 (0 and 4) 1 1/3 cr.

A continuation of M. E. 43a. (No text.)

Mr. Sams

M. E. 45—Gas Engines—Semester 1 (2 and 0) 2 cr.

Prerequisite: M. E. 35, 36.

Purpose: A study of the thermodynamics, construction, and design of internal combustion engines. *Principal Topics*: Theoretical cycles, engine performance, two and four stroke cycles, fuels, combustion, cooling, temperature effects, flywheels, governors, vibration and balancing, engine design.

Mr. Shenk

M. E. 45a—Gas Engine Design—Semester 1 (0 and 3) 1 cr.

Prerequisite: Drawing 26, M. E. 35, 36.

Purpose: The design and layout of an internal combustion engine. *Principal Topics*: To design and make an assembly drawing of an internal combustion engine.

Mr. Fernow

M. E. 46—Steam Turbines—Semester 2 (2 and 0) 2 cr.

Prerequisite: M. E. 35, 36.

Purpose: A study of the principles of operation, construction, and design of the steam turbine. *Principal Topics*: Nozzle design, blade design, staging, governing, economy, etc.

Mr. Sams

M. E. 46a—Steam Turbine Design—Semester 2 (0 and 3) 1 cr.

Prerequisite: Drawing 26; M. E. 35, 36. Registration in M. E. 46.

Purpose: To design and lay out various parts of the steam turbine. *Principal Topics*: Design of nozzle and blading, including assembly and general layout of turbine.

Mr. Fernow

M. E. 47—Heating and Ventilation—Semester 1 (2 and 0) 2 cr.

Prerequisite: M. E. 35.

Purpose: To teach the rudiments of central heating system design and construction. *Principal Topics*: Optimum air conditions, heat loss determination, warm air systems, hot water systems, steam vapor, and vacuum systems; fuels and fuel storage.

Mr. Shenk

M. E. 47a—Heating and Ventilation Design—Semester 1 (0 and 3) 1 cr.

Purpose: To give practical application to the principles of M. E. 47. *Principal Topics*: The design of three heating systems—one for a residence, one for a school building, and another for an industrial plant.

Mr. Shenk

M. E. 48—Heating and Ventilation—Semester 2 (2 and 0) 2 cr.

Prerequisite: M. E. 47.

Purpose: To teach the rudiments of air conditioning. *Principal Topics*: Physiological effects of air conditioning requirements, ventilation equipment, ventilation systems, application of automatic control; industrial exhaust systems.

Mr. Shenk

M. E. 48a—Heating and Ventilation Design—Semester 2 (0 and 3) 1 cr.

Purpose: To provide practical application of the principles of air conditioning systems. *Principal Topics*: The design of three air conditioning systems: one commercial, one industrial, and one for a hospital.

Mr. Shenk

M. E. 49—Mechanics of Materials—Semester 1 (3 and 0) 3 cr.

Prerequisite: M. E. 31.

Purpose: To acquaint students with certain physical constants and stresses in structural members and machine parts. *Principal Topics*: Deformation and stress; torsion; riveted joints; supports, flexure and deflection of a beam; combined stress in short blocks; columns. (*Strength of Materials*—Boyd.)

Mr. Curtis Mr. Wachter

M. E. 50—Aerodynamics—Semester 2 (2 and 0) 2 cr.

Prerequisite: M. E. 31 and approval of instructor.

Purpose: To study the forces acting on a plane in flight. *Principal Topics*: History of aviation, aerodynamic theory as applied to airplane design, including calculations of performance and the study of stability and control.

Mr. Sams

M. E. 51—Refrigeration—Semester 1 or 2 (2 and 0) 2 cr.

Prerequisite: M. E. 35.

Purpose: To teach the application of thermodynamic principles to practical problems in refrigeration. *Principal Topics*: Thermodynamics of refrigeration, heat transfer through building materials and insulation, refrigeration requirements in ice making, meat packing, and in creamery, cold storage and household refrigeration machinery and systems; some economic factors of refrigeration.

Mr. Shenk

MILITARY SCIENCE

Colonel H. M. Pool

Lieut. Col. G. D. Hufford
Lieut. Col. R. F. Walthour
Major J. V. Sims
Capt. E. H. Emanuel
Capt. F. B. Farr
Lieut. E. H. McCarter
Lieut. W. F. Gaffney
Lieut. P. J. Brown
Lieut. H. H. Hill
Lieut. B. L. Neal
Lieut. H. J. Wilkinson
Sergeant K. R. Helton
Sergeant J. G. Bougard
Sergeant F. M. Lasnick
Sergeant G. Cannon

M. S. 11, 12,—Military Science and Tactics—Semesters 1 and 2 (1 and 2) 1 2/3 cr.

Purpose: To instill discipline and the habit of prompt obedience, and to develop leadership ability, while providing basic military instruction. *Principal Topics*: The course includes study of National Defense Act and ROTC, obligations of citizenship, military history and policy, current international situations, military discipline, courtesy and customs of the service, military sanitation and first aid, military organization, especially of the infantry, the theory and practice of military map reading and rifle marksmanship, instruction in command and leadership, guard duty and ceremonies. Physical drill is also given. (*National Service R. O. T. C. Manual*, Volume 1.)

Major Sims Capt. Farr Lt. Wilkinson

M. S. 21, 22—Military Science and Tactics—Semesters 1 and 2 (1 and 2) 1 2/3 cr.

Prerequisite: M. S. 12.

Purpose: Continuation of disciplinary training, additional stress on leadership, and basic instruction in infantry weapons and tactics of the smaller infantry units. *Principal Topics*: This course covers in theory and practice the automatic rifle, characteristics of infantry weapons, scouting and patrolling, musketry and combat principles of the rifle squad and section; additional military history, command and leadership as would apply to infantry corporals and squad leaders, physical training and instruction in guard duty and ceremonies. (*National Service R. O. T. C. Manual,* Volume II.)

Lieut. Col. Hufford Lt. Brown Lt. Neal

M. S. 31, 32—Military Science—Semesters 1 and 2 (0 and 2) 2/3 cr.

Purpose: Training in discipline and leadership; physical development and correction of defects in posture. *Principal Topics*: Drill (close and extended order), command and leadership. Juniors who are not members of the ROTC receive practical instruction in Military Science and Tactics. Members of the ROTC also take M. S. 33 and 34.

Staff

M. S. 33, 34—Military Science and Tactics—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: M. S. 22.

Purpose: Theoretical and practical training in weapons and the principles of their combined action, disciplinary and combat training, leadership, and training methods, to qualify as instructors. *Principal Topics*: This course consists of practical and theoretical training in aerial photograph reading; combat principles of rifle, machine gun and howitzer platoons; pistol and pistol marksmanship; rifle and rifle marksmanship; command and leadership as would apply to infantry sergeants, first sergeants and sergeant majors; instruction in guard duty, physical drill and ceremonies, and in the duties of the senior non-commissioned officers. (*National Service R. O. T. C. Manual,* Volume III.)

Lt. Col. Walthour Lt. McCarter Lt. Hill

M. S. 41, 42—Military Science—Semesters 1 and 2 (0 and 2) 2/3 cr.

Purpose: Training in discipline and leadership as applies to the junior officer; physical development and correction of defects of posture. *Principal Topics*: Drill (close and extended order), command and leadership. Seniors who are not members of the ROTC receive practical instruction in Military Science and Tactics. Members of the ROTC take M. S. 43 and 44.

Staff

M. S. 43, 44—Military Science and Tactics—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: M. S. 34.

Purpose: Instruction in command, leadership, and combat principles; development of initiative and responsibility; administration and training methods; qualification as Junior Officers of the Infantry arm. *Principal Topics*: This course comprises a study of Military History and Policy, Military Law, company administration and supply, Officers Reserve Regulations; tanks, anti-aircraft defense, defense against chemical warfare; combat intelligence, Infantry Signal Communications; Combat Training; principles of rifle, machine gun, and howitzer platoons and companies; command and leadership as would apply to infantry lieutenants. (*National Service R. O. T. C. Manual,* Volume IV.)

Colonel Pool Capt. Emanuel Lieut. Gaffney

PHYSICS

Mr. Brown

Mr. Godfrey Mr. Hendricks Mr. Reed Mr. Huff
Mr. Orens Mr. Vandivere

Physics 11, 12—General Physics—Semesters 1 and 2 (3 and 0) 3 cr.

Prerequisite: Algebra, through quadratics; Plane Geometry.

Purpose: To give the student a knowledge of the fundamental principles of physics and to apply these principles to numerous problems. *Principal Topics*: The laws of motion of solids and fluids, heat, thermometry, the principles of electricity, magnetism, sound, and light.

Mr. Godfrey Mr. Hendricks Mr. Huff Mr. Orens Mr. Vandivere

Physics 15, 16—General Physics Laboratory—Semesters 1 and 2 (0 and 2) 2/3 cr.

This course must be taken with Physics 11, 12, 27 and 29.

Purpose: A study of the individual experiments generally given in a first year course in college physics.

Mr. Godfrey Mr. Huff Mr. Vandivere

Physics 17, 18—Premedical Physics Laboratory—Semesters 1 and 2 (0 and 3) 1 cr.

This course must be taken with Physics 11, 12.

Purpose: A similar course to Physics 15, 16 but requiring more time in the laboratory.

Physics 21, 22—General Physics—Semesters 1 and 2 (4 and 0) 4 cr.

Prerequisite: Mathematics 11, 13 and 14.

Purpose: To give the student a knowledge of the fundamental theory of physics and the application of the principles to problems in engineering. *Principal Topics*: Mechanics, dynamics, thermometry, heat, magnetism, electricity, sound, and light.

Mr. Brown Mr. Hendricks Mr. Huff Mr. Orens

Physics 23, 24—Laboratory Physics—Semesters 1 and 2 (0 and 3) 1 cr.

This course must be taken with Physics 21, 22.

Purpose: To study the application of the theory in physical phenomena, acquire skill in observation and manipulation. *Principal Topics*: Measurement of several physical constants in mechanics, heat, and light; study of electrical measurements and instruments.

Mr. Brown Mr. Hendricks Mr. Huff Mr. Orens

Physics 27—General Physics—Semester 2 (3 and 0) 3 cr.

Purpose: To study the fundamental principles of Physics as applied to problems in agriculture. *Principal Topics*: Work, power, machines, efficiency, osmosis, surface tension, heat and heat engines, magnetism, electricity, and light.

Mr. Reed Mr. Orens Mr. Vandivere

Physics 29—General Physics—Semester 1 (3 and 0) 3 cr.

Purpose: A short course for students of agriculture with especial reference to the applications of physics. *Principal Topics*: Force, acceleration, power, machines, heat, light, sound, magnetism, and electricity.

Mr. Godfrey Mr. Reed Mr. Huff

PHYSICS 31, 32—MODERN PHYSICS—Semesters 1 and 2 (3 and 0) 3 cr.

Prerequisite: Physics 21, 22; *Suggested*: Mathematics 21, 22.

Purpose: To give the student a general knowledge of the more recent developments in physics and to familiarize him with the modern methods of investigation. *Principal Topics*: Kinetic theory of gases, electron theory, X-rays, radio activity, atomic structure, theory of quanta, cosmic rays, geophysics, astrophysics, radio, and television. (*Modern Physics*—Jauncey.)

MR. HUFF

PHYSICS 33—DESCRIPTIVE ASTRONOMY—Semester 1 or 2 (2 and 0) 2 cr.

Prerequisite: General Physics.

Purpose: To give a general knowledge of the facts of astronomy and to study the methods of determining latitude and longitude. *Principal Topics*: Coordinate systems and apparent motions, the planets, the sun and moon, properties of the stars. (*Introduction to Astronomy*—Baker.)

MR. GODFREY MR. HUFF

PHYSICS 34—MAGNETISM AND ELECTRICITY—Semester 2 (3 and 0) 3 cr.

Prerequisite: General Physics.

Purpose: A course primarily for students in Agricultural Engineering. *Principal Topics*: The electric and magnetic field, potential, transformers, properties of transmission lines, storage batteries, properties of vacuum tubes.

MR. REED

PHYSICS 35—MECHANICS AND PROPERTIES OF MATTER—Semester 1 (2 and 0) 2 cr.

Prerequisite: General Physics.

Purpose: A further study of the mechanical properties of matter. *Principal Topics*: The motion of particles and of rigid bodies, gyroscopes, elasticity, surface tension, the flow of fluids, gravitation.

MR. HUFF

PHYSICS 36—SOUND AND LIGHT—Semester 2 (2 and 0) 2 cr.

Prerequisite: General Physics.

Purpose: To study the laws governing the transmission of sound and light. Emphasis is placed on architectural applications. *Principal Topics*: Wave motion; velocity of sound in air and other media; sound in rooms; laws of optics, mirrors, prisms, and lenses; wave nature of light; polarization.

Mr. Brown

Physics 37—Heat—Semester 2 (2 and 0) 2 cr.

Prerequisite: General Physics.

Purpose: To give the student a thorough knowledge of the fundamental principles of heat measurements. Emphasis is placed on chemical applications. *Principal Topics*: Thermometry, calorimetry, change of state, kinetic theory of gases, elements of thermodynamics.

Mr. Hendricks

Physics 38—Introduction to the Philosophy of Science—Semester 2 (2 and 0) 2 cr.

Prerequisite: General Physics; Chemistry or Biology.

Purpose: To analyze the meaning of Science as a method of human intelligence and to study the solutions offered to the problems of philosophy by the special sciences. Emphasis is placed upon the determination of the place of the sciences in relation to other human institutions and the evaluation of the structure of scientific method as a standard for social movements.

Mr. Orens

Physics 39—Logic and Scientific Method—Semester 1 (2 and 0) 2 cr.

Purpose: To study the principles of reasoning as formulated by Logic and to investigate the application of these principles to scientific investigation as an aid in understanding the methods of the sciences in theoretical and laboratory procedure.

Mr. Orens

POULTRY HUSBANDRY

Mr. Morgan

P. H. 32—Farm and Commercial Poultry Production—Semester 2 (2 and 2) 2 2/3 cr.

Purpose: To study the fundamental principles of poultry production and the factors necessary for profitable flock management as a farm en-

terprise and a commercial business. *Principal Topics*: The nature and uses of poultry products, scope of the industry and agencies involved; classification of poultry; structure of fowl; fundamentals of flock improvement, culling and judging; incubation, brooding, feeding principles and practices; poultry house construction; disease control and sanitation, and economic aspects of poultry production. (*Poultry Husbandry*—Jull.)

Mr. Morgan

P. H. 41—Poultry Judging and Breeding—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Poultry Husbandry 32 and Genetics.

Purpose: To give the fundamental principles and practices in judging poultry for production and show, to study the principles of poultry breeding. *Principal Topics*: History and development of culling and judging for production bases of poultry classification and standard judging inheritance in poultry and improvement of birds through the application of genetic laws. (*Poultry Breeding*—Jull.)

Mr. Morgan

P. H. 42—Poultry Production and Management—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Poultry Husbandry 32.

Purpose: To give detailed study to incubation and brooding principles and practices, to study the effects of various feeds and rations, study of management practices. *Principal Topics*: Temperature, humidity, and ventilation in relation to incubation; incubator operation; brooding and rearing methods; feeds and rations for baby chicks; growing stock, breeding stock, and laying hens; effects of feeds and rations on the character and quality of poultry products; poultry farm plan and management. (*Research Bulletins and Scientific Literature.*)

Mr. Morgan

PSYCHOLOGY

Mr. Alexander

Psychology 35, 36—Psychology for Teachers—Semesters 1 and 2 (2 and 2) 3 cr. each semester.

Prerequisite: Junior standing.

Purpose: To acquaint students of education and others with some fundamental characteristics of human behavior. *Principal Topics*: Physiological basis of behavior, mental growth, the emotions and their ex-

pression, the learning process, individual differences and their measurement, personality, problem children, abnormal behavior.

MR. ALEXANDER

PSYCHOLOGY 46—ABNORMAL BEHAVIOR—Semester 2 (3 and 0) 3 cr.

Prerequisite: Psychology 35.

Purpose: To develop a general knowledge of abnormal behavior. *Principal Topics*: Mental defect, the psychoses and psychoneuroses, psychopathic personalities.

MR. ALEXANDER

PSYCHOLOGY 47—SOCIAL PSYCHOLOGY—Semester 1 (2 and 0) 2 cr.

Prerequisite: Psychology 35.

Purpose: To study the social behavior of the individual. *Principal Topics*: The development of personality, social stimulation, crowd behavior, pro-social, and anti-social conduct.

MR. ALEXANDER

*RELIGION**

MR. CROUCH MR. CLYBURN MR. GOODE

RELIGION 21, 22—OLD TESTAMENT—Semesters 1 and 2 (2 and 0) 2 cr.

Free elective for Sophomores. Others admitted by permission.

Purpose: To introduce the student to the Old Testament, its history, its inspiration, and interpretation, as revealed in a study of the prophets. *Principal Topics*: The prophets of the Old Testament are studied from the standpoint of origin, literary form and content in their historical setting. The text of the Bible itself is studied carefully for its religious and ethical teachings. (*The Prophets of Israel*—Harrell.)

MR. CLYBURN

RELIGION 23, 24—LIFE OF CHRIST—Semesters 1 and 2 (2 and 0) 2 cr.

Free elective for Sophomores. Others admitted by permission.

Purpose: To acquaint the students with the facts in the life of Christ in the order of their occurrence. *Principal Topics*: Historical study of the Gospels: their parallelism, the similarity and differences in the four narratives, brief glance at synoptic criticism, authorship and historical value of the Gospel of John, the measure of the importance and influence

*This work is not financed by the College; it is offered as free elective.

of facts studied, and a brief analysis of the more important of Christ's discourses. (*A Harmony of the Gospels*—Robertson.)

Mr. Goode

Religion 31, 32—New Testament Outline—Semesters 1 and 2 (2 and 0) 2 cr.

Free elective for Juniors. Others admitted by permission.

Purpose: To study the beginning and the spread of Christianity during the New Testament period. *Principal Topics*: Conditions in the Roman world at the beginning of the Christian era; those factors which later aided in the spread of the Gospel; a study of the life and works of Jesus Christ, as the Founder of Christianity, according to Matthew's Gospel; the spread of the Gospel as contained in the Acts of the Apostles and the Epistles.

Mr. Crouch

Religion 41, 42—Ethics in Religion—Semesters 1 and 2 (2 and 0) 2 cr.

Free elective for Seniors. Others admitted by permission.

Purpose: To give a general knowledge of the history and development of religious and moral ideals. *Principal Topics*: The nature and scope of conduct, the relationship of man's conduct to his religious loyalties, the inseparable connection between religious and moral ideals. The historical development: Pre-Christian, Greek, Roman, Hebrew; the ethics of Jesus; further development of ethical ideals in the life of the church, modern theories of life.

SOCIOLOGY

Mr. Alexander Mr. Burtner

Sociology 31—Elementary Sociology—Semester 1 or 2 (2 and 0) 2 cr.

Prerequisite: Junior standing.

Purpose: To give a knowledge of basic principles in sociology. *Principal Topics*: Culture, biology, geography, and groups as factors in the social life of man, personality development, personality disorganization, crowds, publics, social classes, the social processes, human ecology, population problems, communities, social institutions, cultural growth, and social disorganization.

Mr. Alexander Mr. Burtner

Sociology 41—Criminology—Semester 1 (2 and 0) 2 cr.

Prerequisite: Sociology 31 and permission of the instructor.

Purpose: To introduce the student to the principal problems of crime and its treatment. *Principal Topics*: The nature and causes of crime, criminal behavior, theories and practices in the treatment of criminals, prevention of crime. A report on recent literature in the field or a brief study of some crime problem is required.

Mr. Alexander

Sociology 42—The Family—Semester 2 (2 and 0) 2 cr.

Prerequisite: Sociology 31 and permission of the instructor.

Purpose: To assist the student in developing perspective concerning the problems of marriage and family life. *Principal Topics*: History of the family, mate selection and courtship, husband-wife relationship, parent-child interaction, divorce, conservation of family values.

Mr. Alexander

Sociology 44—Advanced Sociology—Semester 2 (3 and 0) 3 cr.

Prerequisite: Sociology 31 and permission of the instructor.

The purpose and topic of this course will be adjusted to the interests of the class and will vary from year to year.

Mr. Alexander

SPANISH

Mr. Brandon

Spanish 11, 12—Beginner's Spanish—Semesters 1 and 2 (3 and 0) 3 cr.

Purpose: To provide the student with a foundation upon which, by subsequent work, he can attain a reading knowledge of Spanish. *Principal Topics*: The essentials of Spanish grammar. Stress is laid on pronunciation, conversation, and drill in the fundamental constructions. Dictation is given throughout the year. In the second semester an elementary reader is used.

Mr. Brandon

Spanish 21, 22—Second-Year Spanish—Semesters 1 and 2 (3 and 0) 3 cr.

Purpose: To help the student to build up a reading knowledge of Spanish. *Principal Topics*: Review of grammar, reading of short stories, plays, and books dealing with the life, history, and customs of Spanish speaking countries.

Mr. Brandon

Spanish 31, 32—Third-Year Spanish—Semesters 1 and 2 (2 and 0) 2 cr.

A course of rapid reading of literary or scientific Spanish prose.

Mr. Brandon

TEXTILE CHEMISTRY AND DYEING

Mr. Lindsay Mr. Huckabee Mr. Hicks

T. C. 31 and 32—Textile Chemistry—Semesters 1 and 2 (2 and 2) 2 2/3 cr.

Prerequisite: Chemistry 12.

Purpose: This course is designed to give the student the general knowledge of the subject that is essential to the management of any modern textile plant. *Principal Topics*: A general introduction into the theory of textile chemistry. Particular attention is given to the textile fibers, dyestuffs, and organic compounds used in the textile and related industries. (*Introduction to Organic Chemistry*—Lowy and Harrow; *T. C. Mimeograph* Notes.)

Mr. Huckabee Mr. Hicks

T. C. 35 and 38—Textile Chemistry—Semesters 1 and 2 (4 and 3) 5 cr.

Prerequisite: Chemistry 12, 23 and 24.

Purpose: This course is designed particularly for textile chemists in that it covers the theories of formation and chemical behavior of the products used in bleaching, dyeing, and finishing. *Principal Topics*: A systematic and thorough course emphasizing especially the more complex compounds used in the textile industry such as carbohydrates (cellulose and starches); proteins (silk and wool); azo; anthraquinone and other similar compounds (dyestuffs); enzymes and ferments (desizing products). (*The Chemistry of Organic Compounds*—Gonant).

Mr. Huckabee

T. C. 39 and 40—Dyeing—Semesters 1 and 2 (0 and 2) 2/3 cr.

Purpose: A laboratory course in dyeing with occasional lectures, intended primarily for students specializing in Weaving and Design or Yarn Manufacture. *Principal Topics*: The methods of bleaching and dyeing the different types of fibers are taught through laboratory experiments. Color-matching and evaluation of dyestuffs are considered briefly. (*T. C. Mimeograph Notes.*)

Mr. Lindsay Mr. Hicks

T. C. 41 and 42—Textile Chemistry and Dyeing—Semesters 1 and 2 (2 and 2) 2 2/3 cr.

Prerequisite: Textile Chemistry 32, 38.

Purpose: This course is designed to give Textile Engineers a general knowledge of the subject. *Principal Topics*: A general study of the chemistry of the textile fibers, dyestuffs and their application, detergents and scouring, bleaching, sizing preparation and its application, desizing, mercerizing, finishing, etc. While covering all of the fibers, particular attention is given to cotton. (*Dyeing with Coal Tar Dyestuffs*—Whittaker; *T. C. Mimeograph Notes.*)

Mr. Lindsay Mr. Hicks

T. C. 41.5 and 42.5—Textile Chemistry and Dyeing—Semesters 1 and 2 (4 and 4) 5 1/3 cr.

Prerequisite: Textile Chemistry 38 or Chemistry 36.

Purpose: An advanced course in the subject for those desiring to become textile chemists or dyers. *Principal Topics*: This course comprises a full and complete study of the textile fibers, the action of the various reagents upon them, and the various processes through which they pass in the different stages of textile manufacture. Application of dyes to the different classes of textile fibers is fully covered in the laboratory by the usual dyepot experiments, and also by larger scale dyeings. (*Dyeing with Coal Tar Dyestuffs*—Whittaker; *The Application of Dyestuffs*—Matthews; *T. C. Mimeograph Notes.*)

Mr. Lindsay

T. C. 43—Cellulose Chemistry—Semester 1 (2 and 0) 2 cr.

Prerequisite: Textile Chemistry 35.

Purpose: To give the student a thorough knowledge of the latest theories regarding the constitution of our most common and important

textile fiber. *Principal Topics*: A study of the chemistry of cellulose based upon the latest research. Particular attention is paid to the preparation of wood pulps for the manufacture of rayon and paper. (*Chemistry of Cellulose and Wood*—Schorger; *An Introduction to the Study of Cellulose*—Murah and Wood.)

MR. LINDSAY

T. C. 45 and 46—ANALYSIS OF TEXTILE MATERIALS—Semesters 1 and 2 (1 and 3) 2 cr.

Prerequisite: Chemistry 24 and Textile Chemistry 38.

Purpose: To prepare the student to make analyses pertaining to the materials used in the textile and related industries. *Principal Topics*: The technical analysis of the various chemicals and materials used in the textile industry, including yarns and fabrics, water, soap, sizes, finishes, oils, etc., and hydrogen ion determinations by the colorimetric and potentiometric methods. (*Technical Methods of Analysis*—Griffin.)

MR. HICKS

T. C. 48—SYNTHETIC FIBER CHEMISTRY—Semester 2 (2 and 0) 2 cr.

Prerequisite: Cellulose Chemistry.

Purpose: To equip the student with the knowledge essential to the undertaking of the work in the synthetic fiber industry. *Principal Topics*: A study of the chemistry and mechanics involved in the manufacture of the various synthetic fibers; the chemical, physical and textile properties of the various products, etc. (*Artificial Silk*—Reinthaler and Rowe; *T. C. Mimeograph Notes.*)

MR. LINDSAY

T. C. 50 and 51—THESIS—Semesters 1 and 2 (0 and 3) 1 cr.

Purpose: To determine the ability of the student to initiate and satisfactorily complete an advanced problem generally related to some work he wishes to pursue after graduation. *Principal Topics*: An investigation of an assigned problem relating to textile chemistry, dyes or dyeing, including the preparation of a written report of this work. When the student has already decided upon some work which he will follow after graduation, an effort is made to assign the investigation to this or a closely related subject.

MR. LINDSAY

Division Rooms and Equipment.—All work in textile chemistry and dyeing is conducted in the class room laboratory and dye-house, both especially provided for this purpose.

Besides the usual dyeing laboratory equipment, the dye house contains a hydroextractor, Franklin process and Columbus package dyeing machines (one of which is also suitable for bleaching purposes), a Hussong skein dyeing machine, a jigger, a printing machine, a Permutit water softening system, fadeometer, spectroscope, potentiometric and colorimetric hydrogen ion concentration determination equipment, special rubber-lined rayon dyeing equipment, spray printing equipment, launder-o-meter, Rodney Hunt kier; Rodney Hunt piece goods dyeing machine; monel metal tanks; Strickland monel metal hosiery dyeing machine; Philadelphia Metal Drying Forms for hosiery, etc.

TEXTILE MANAGEMENT

MR. WILLIS MR. EATON MR. CAMPBELL MR. HICKS

T. M. 41 and 42—TEXTILE COSTING—Semester 1 (1 and 2) 1 2/3 cr., Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Open to juniors and seniors in the Textile School.

Purpose: To teach the fundamentals of textile costing procedure and the control of manufacturing costs. *Principal Topics*: Standard costs, cost control, valuing the inventory, material costs, labor budgets, distribution of fixed charges, departmental processing costs, determining the costs of individual yarns and fabrics, cost reports. (*Textile Costing—An Aid to Management*—Lockwood and Maxwell; *Elementary Textile Costing,* Parts II and III—Campbell and Willis.)

MR. CAMPBELL

T. M. 43—TEXTILE ORGANIZATION AND PERSONNEL PROBLEMS—Semester 1 (1 and 0) 1 cr.

Purpose: To give the student an insight into the principles of textile mill organization. *Principal Topics*: Selecting equipment, equipment layout, time and motion study, factors affecting the respective jobs, and personnel problems in textiles. (*Primer of Time Study*—Shumard; T. M. Mimeograph Notes.)

MR. WILLIS

T. M. 44—TEXTILE MANAGEMENT—Semesters 1 or 2 (2 and 0) 2 cr.

Prerequisite: At least one textile course, preferably T. M. 41 and 42.

Purpose: To give seniors the principles of management as applied to general textiles. *Principal Topics*: Cloth and cotton prices and their relation, calculations for quotations and delivery dates, mill construction,

fire and accident insurance, wage and labor conditions. Some of these topics are made the subjects of written reports. (T. M. Mimeograph Notes; *Management of a Textile Business*—Balderston and Karabasz.)

Mr. Eaton

T. M. 46—Textile Testing and Research—Semester 2 (1 and 0) 1 cr.

Purpose: To instruct the student in testing fiber, yarns, and fabrics. *Principal Topics*: The principal topics include such factors as variety, growing conditions, fiber uniformity, and other factors influencing the strength and uniformity of yarns. The importance of humidity and its effect upon the working qualities and strength of yarn will be demonstrated. (A. S. T. M. Specifications; T. M. Mimeograph Notes.)

Mr. Willis

T. M. 48—Textile Microscopy—Semester 1 or 2 (1 and 1) 1 1/3 cr.

Purpose: This course is especially planned to enable the student to utilize the microscope for examination and identification of textile fibers and materials used in the textile and related industries. *Principal Topics*: The preparation of the various materials used in the textile industry for microscopic examination. (*Textiles and the Microscope*—Schwarz; T. M. Mimeograph Notes.)

Mr. Hicks

Testing Laboratory

The textile testing laboratory is equipped with American Moistening humidifying and dehumidifying units, automatically controlled. The laboratory is equipped with modern machines for testing fibers, yarns, and fabrics.

VETERINARY SCIENCE

Mr. Feeley

Vet. Sci. 41—Anatomy and Physiology—Semester 1 (2 and 2) 2 2/3 cr.

Purpose: To give agricultural students a general knowledge of anatomy and physiology of farm animals. *Principal Topics*: Physiology of digestion, chemical and physical processes of digestion and absorption, common diseases, farm sanitation, and first aid treatment. (*Veterinary Science*—Hadley.)

Mr. Feeley

VET. SCI. 42—DISEASES OF ANIMALS—Semester 2 (2 and 2) 2 2/3 cr.

Purpose: To give agricultural students instruction in the recognition, causes, and treatment of the diseases of farm animals. *Principal Topics*: The principles of etiology, pathology, diagnosis, symptoms, and treatment of infectious and non-infectious diseases.

MR. FEELEY

VOCATIONAL EDUCATION

MR. WASHINGTON

MR. CRANDALL *MR. MONROE MR. BOWEN MR. BOOKER
*MR. TATE MR. STRIBLING MR. JOHNSON MR. BROCK
MR. WHITE MR. KIRKLEY MR. KIRCHNER
MR. ALEXANDER MR. JONES

VOC. ED. 11—ORIENTATION—Semester 1 (1 and 0) 1 cr.

Purpose: To aid the freshman in adjusting himself to the College environment and his course of study.

MR. WASHINGTON MR. CRANDALL MR. BOOKER MR. TATE

VOC. ED. 21—INTRODUCTION TO EDUCATION—Semester 1 (2 and 0) 2 cr.

Purpose: To develop a broad concept of education and a comprehensive view of the scope and opportunities in teaching, to set up desirable objectives for education and to develop a desire for professional growth. *Principal Topics*: Scope, meaning, and significance of education, more significant aspects of teaching, teaching and learning principles, efficient study procedure, professional education's contributions to the successful work of the teacher, teacher personality traits, individual differences and teaching, outcomes of education, status of teaching profession, major problems of education.

MR. BROCK

VOC. ED. 22—INTRODUCTION TO VOCATIONAL EDUCATION—Semester 2 (1 and 0) 1 cr.

Purpose: To introduce the student to the field of education as a whole and to develop a background for further educational training. *Principal Topics*: The place of vocational education in the educational system, the subject-matter fields related to the vocation for which the student is planning to become a teacher, the place of the teacher in the community.

MR. CRANDALL MR. BROCK

VOC. ED. 28—OBSERVATION OF INDUSTRIAL TEACHING—Semester 2 (0 and 3) 1 cr.

---

*On leave 1940-1941.

Purpose: To give the student a practical acquaintance with the duties of the industrial arts teacher, teacher of trade and industrial subjects, and coordinator of diversified occupations programs.

*Mr. Tate Mr. Brock

Voc. Ed. 30—Educational Psychology—Semester 2 (3 and 0) 3 cr.

Purpose: To train students to better meet the problems encountered in schools. *Principal Topics*: The learning process, individual differences as affecting educational and vocational performances, the project method of teaching, securing and maintaining interest, discipline, program planning, selecting teaching units, job analysis, developing lesson plans, grading, relation of the teacher to local school authorities, supervisors, and other school officials. The psychology applied to conference leading, adult teaching, and the interview, with special emphasis on vocational implications.

Mr. Stribling

Voc. Ed. 31—Introduction to Agricultural Education—Semester 1 (1 and 6) 3 cr.

Purpose: To familiarize students with the work of teachers of agriculture in local communities. *Principal Topics*: Students observe and report on the work of all-day, part-time, evening and day unit classes, community and promotional work, equipment and general organization of a program in agricultural education for a local community. Each trainee develops several units of teaching content and instructs classes in vocational agriculture. Students spend two afternoons each week in the practice department.

Mr. Crandall *Mr. Monroe Mr. Stribling Mr. Johnson Mr. Bowen

Voc. Ed. 31.6, 32.6—Special Methods in Industrial Arts—Semesters 1 and 2 (2 and 2) 2 2/3 cr.

Purpose: To give the student fundamental skills, knowledges, and shop content in woodwork, to give the special technique and method of approach in teaching shop subjects in high schools. *Principal Topics*: Project construction, finishing, construction, and care of shop tools and equipment, materials, characteristics of woods, fasteners, finishing materials, glues, the shop budget. These topics are taken up from the standpoint of the most progressive methods of shop teaching in industrial arts.

Mr. Marshall

Voc. Ed. 32—Organization of Trade and Industrial Courses of Study—Semester 2 (3 and 0) 3 cr.

---

*On leave 1940-1941.

Purpose: To have students build trade and industrial courses based upon specific analysis of the jobs to be taught, and to have students use these courses in teaching. *Principal Topics*: Purpose, scope, and use of job analysis in writing courses of study, writing and using instruction sheets for teaching, constructing achievement tests in industrial subjects. The student is required to select some industrial subject and write a course of study based upon analyses of jobs covered under that subject. Prospective teachers are urged to select subjects which they expect to teach later.

MR. BROCK

*VOC. ED. 33—FUNDAMENTALS OF PHYSICAL EDUCATION—Semester 1 (3 and 0) 3 cr.

Purpose: To give the student a knowledge of the basic principles underlying the promotion of an adequate program of physical education. *Principal Topics*: The place of physical education in the curriculum of the modern school. The relation of physical education to the scheme of general education. The part that anatomy, physiology, hygiene, sociology, psychology and like sciences have to do with a successful physical education program. Methods of motivating physical education are stressed.

MR. KIRCHNER

VOC. ED. 33.5, 34.5—ART METAL WORK—Semesters 1 and 2, 1-3 cr.

Purpose: This course is primarily for industrial education students and others who plan to teach art metal courses in public schools and who would like to become acquainted with the making of plates, letter openers, trays, bowls, and metal-working tools. To study methods of teaching and methods of introducing art metal work in the public schools. *Principal Topics*: The obtaining of tools and materials, organizing the class, methods of teaching, making wooden mallets, forming blocks, actual making of objects, teaching art metal work to selected students.

MR. BROCK

VOC. ED. 35—PSYCHOLOGY FOR TEACHERS—Semester 1 (2 and 2) 3 cr.

(See Psychology 35.)

Purpose: To acquaint students of education and others with some fundamental characteristics of human behavior. *Principal Topics*: Physiological basis of behavior, mental growth, the emotions and their expression, the learning process, individual differences and their measure-

---

*Voc. Ed. 33, 49.5, 58, and 64 are courses in Physical Education; other courses may also be offered in this field.

ment, personality, problem children, abnormal behavior. (*Psychology for Students of Education*—Gates; *Personality, Its Development and Hygiene* —Richmond.)

MR. ALEXANDER

VOC. ED. 37—RURAL AND VILLAGE SCHOOL PROBLEMS—Semester 1 (3 and 0) 3 cr.

Purpose: To introduce the student to the problems facing a teacher in rural and small town schools, and from this to determine the qualifications necessary for a successful teacher. *Principal Topics*: Correlation of the curriculum with the desirable social trends in agricultural and industrial communities, the summer session, transportation problems, special qualifications of teachers.

*MR. MONROE

VOC. ED. 38—TEACHING OF DRAWING—Semester 2 (2 and 2) 3 cr.

Prerequisite: Drawing 14 (or equivalent).

Purpose: To train for the teaching of drawing and the understanding of some of the elements of the subject. *Principal Topics*: Psychology as applied to the subject, planning the layout of suitable course to meet group needs, some of the arts and sciences used in drawing, fitness of teacher and student in class work, vocational direction in this field, methods, reading of drawings, grades, and grade methods. (Reference texts used as assigned.)

MR. KLUGH

VOC. ED. 39—PRINCIPLES OF SECONDARY EDUCATION—Semester 1 (3 and 0) 3 cr.

Purpose: To give prospective teachers the results of experience, research, and thinking in education which form the basis of sound practice in teaching trade and industrial as well as other high school subjects. *Principal Topics*: Characteristics and need of general and vocational education, characteristics of learning, knowledge and thinking ability, motor, moral, and appreciative reactions, choice of subjects and activities, influence of age, maturity, and individual differences, methods of teaching, appraising results of education.

*MR. TATE

VOC. ED. 40—PRACTICE TEACHING IN AGRICULTURE—Semester 2 (0 and 15) 5 cr.

---

*On leave 1940-1941.

Purpose: To give the students an opportunity to discharge the duties and responsibilities of an agricultural teacher in a local community. *Principal Topics*: Students participate in all-day, part-time, evening-class, and day-unit work. Habits, attitudes, ability to assume responsibility, promptness, general reliability, and degree of skill developed are some of the factors considered in rating the student as a prospective teacher. Students spend five afternoons a week in the practice schools. The opening date, daily schedule and general program of the high school may determine registration and participation in this course.

Mr. Crandall *Mr. Monroe Mr. Stribling Mr. Johnson Mr. Bowen

Voc. Ed. 41—Principles of Vocational Education—Semester 1 (1 and 9) 4 cr.

Purpose: To instruct students in principles and methods in connection with practice teaching. *Principal Topics*: Emphasis is placed on the participation of students in all possible phases of the work of a teacher of agriculture in a local community. Students organize and teach all-day, part-time, evening, and day-unit classes. Students are held responsible for definite phases of community and promotional work.

Mr. Crandall Mr. White *Mr Monroe Mr. Stribling Mr. Bowen

Voc. Ed. 42—Methods in Agricultural Education—Semester 2 (3 and 0) 3 cr.

Purpose: Problems and difficulties that arise in practice teaching receive special emphasis in this course. *Principal Topics*: A thorough survey is made of teaching content for all-day, part-time and evening-class students. Students make careful analyses of conditions and practices of farming in a local community as a source of teaching content. Other sources of teaching content which receive emphasis in this course are data from experiment stations and the United States Department of Agriculture.

Mr. Crandall

Voc. Ed. 43 and 44—Practice Teaching in Trade and Industrial Subjects—Semesters 1 and 2 (0 and 10) 5 cr.

Purpose: To develop through supervised practice-teaching those techniques, attitudes, and principles universally valuable in teaching, to give prospective teachers experience in handling problems in the school. *Principal Topics*: Organizing class, selection of teaching materials, planning work, discipline, teaching methods, examinations and grading, cooperation with school personnel, records and reports, inventories, and up-

*On leave 1940-1941.

keep of equipment. Each student teacher periodically is given an opportunity to teach some industrial subject. During his teaching period he is responsible for his class just as if he were an employed teacher of that subject, including conforming to the high school schedule and registration period.

*Mr. Tate Mr. Brock

Voc. Ed. 45—Teaching Science—Semester 2 (3 and 0) 3 cr.

Purpose: To familiarize students with the objectives and methods of science instruction in public schools. *Principal Topics*: Project method of teaching science, aims and values of science instruction, teaching content, classroom procedure, and relationship of science instruction to the general and vocational courses and to administrative procedures.

Voc. Ed. 46—Technique of Teaching—Semester 2 (3 and 0) 3 cr.

Purpose: To acquaint the prospective teacher with the most significant problem in trade and industrial teaching, to propose solutions for those problems consistent with most authoritative information available. *Principal Topics*: Shop planning, organizing classes, selection of equipment and tools, ways of securing materials and supplies for school shop, introducing a shop program, financing a shop program, advertising a shop program, methods of teaching, and discipline.

*Mr. Tate

Voc. Ed. 47—History and Philosophy of Education—Semester 2 (2 and 0) 2 cr.

Purpose: To acquaint the student with the historical development of education and to develop an appreciation for the contributions of the various leaders in education. *Principal Topics*: Education in the Orient, early European education, the contributions of Plato, Luther, Locke, Rousseau, Spencer, Herbart, Dewey, and others. The development of public education in South Carolina, special attention given to the social significance of the school.

Mr. Washington

Voc. Ed. 48—Teaching of Physics and Mathematics—Semester 2 (3 and 0) 3 cr.

Purpose: To train the prospective teacher in course-building and the methods of teaching as applied especially to mathematics and physics. *Principal Topics*: The purpose of physics and mathematics in the high school course, project planning, lesson planning, analysis of adopted textbooks, supplementary teaching materials and equipment, conduct of the recitation, grading, class management, and discipline.

*On leave 1940-1941.

Voc. Ed. 49.5—Leadership in Community Recreation—Semester 1 or 2 (2 and 3) 3 cr.

Purpose: To train leaders in the recreation field. *Principal Topics*: The aims, objectives and philosophy of the recreation movement. Historical background. Planning programs to meet community needs in the rapidly expanding leisure. A survey of organizations dealing with recreational problems. Students are given the opportunity to get practical experience in leadership by conducting social recreation activities and game programs in adjacent communities.

Mr. Kirchner

Voc. Ed. 50—Problems in Advanced Woodwork for Teachers—Semesters 1 and 2 (1 and 2) 1 2/3 cr.

Mr. Marshall

Voc. Ed. 51—Practice Teaching in High School Subjects—Semesters 1 and 2 (0 and 6) 3 cr.

Purpose: To give supervised practice in teaching general science, chemistry, mathematics, civics, etc., in order to develop skill in the best methods of teaching these subjects. (Enrollment is by individual approval and may be dependent upon observing the high school schedule including registration, etc.) *Principal Topics*: Selection of subject matter, planning work, methods of teaching, examinations, grading, discipline, cooperation with school personnel, records, and reports. When possible the student teacher is allowed to teach his subject of greatest interest. During his teaching period he is under close supervision and is held fully responsible for his class.

*Mr. Tate

Voc. Ed. 53—Practice Teaching in Evening Classes—Semesters 1 and 2 (0 and 2) 1 cr.

Purpose: To give the prospective industrial teacher practice in organizing trade and industrial evening-classes, organization of suitable instructional material and the actual teaching of such classes. *Principal Topics*: Organization of classes, selection of teaching material, planning work, cooperation with industry, reports and records, and follow-up.

*Mr. Tate Mr. Brock

Voc. Ed. 55—Diversified Occupations—Semester 1 (2 and 0) 2 cr.

Purpose: To study the major occupations in the United States and in South Carolina in order that prospective teachers may become informed

*On leave 1940-1941.

as to possibilities in them and more intelligently give guidance to high school students. *Principal Topics*: A survey of the youth problem, employment trends, general industrial conditions, kind of men industries want, survey of industrial plants, testing for mechanical aptitude, organizing occupations course in high school.

Mr. Booker

Voc. Ed. 56—Educational and Vocational Guidance—Semester 2 (3 and 0) 3 cr.

Purpose: Study of meaning, purpose, and aim of guidance, methods of investigation in guidance, methods of guiding students, results of guidance. Each student will prepare a program of guidance suitable for a typical school system. *Principal Topics*: Need, meaning, basic assumptions, aims, and objectives of guidance; general methods of investigation; use of school records, explanatory activities, tests, estimates of personality traits, and self-analysis as methods of studying the individual; methods of securing and assembling facts about courses of study in educational instruction; methods of study of occupations; guidance of students in choice of occupation; choice of training, and organization of guidance.

Voc. Ed. 58—High School Coaching—Semester 2 (2 and 0) 2 cr.

Purpose: To train prospective high school coaches in the fundamentals of developing individuals and teams. *Principal Topics*: Emphasis is given to educational value of clean sports and particular attention is given to the physical condition of the student body, conditioning and training for competitive participation in football, basketball, and baseball. Field laboratory work may be required in addition to the class work.

Mr. Howard

Voc. Ed. 59—Administration of Vocational and Other Schools—Semester 1 (2 and 0) 2 cr.

Purpose: To acquaint the prospective teacher with modern administration technique in public education. *Principal Topics*: The public school curriculum, the administration of vocational departments, the duties of the principal and his relationship to the school board, etc. Attention will also be given to certain legal phases of school administration.

Mr. Washington

Voc. Ed. 60—Coordinating Cooperative Vocational Education—Semester 2 (1 and 3) 2 cr.

Purpose: To train students in organizing and supervising a program of vocational education carried on cooperatively between the high school and industries in the community. *Principal Topics*: Vocational education and the community, responsibilities of the coordinator, organizing a cooperative program, evaluating the program, developing schedule of processes, supervising the program, promoting vocational evening classes, development of vocational library, teaching related technical material.

Mr. Booker

Voc. Ed. 61 and 62—Industrial Laboratory—Semesters 1 and 2 (0 and 6) 2 cr.

Purpose: To develop an industrial backgound for the teacher who is to have charge of a comprehensive industrial program in a community where an effort is being made to train young men and adult industrial workers in the individual skills of productive employment in industrial occupations. This will include woodworking, painting, metalworking, drafting, etc., and also the interplay of skills between these as adapted to teaching situations. *Principal Topics*: Planning, investigating, and determining the requirements in the way of materials, time and equipment, and executing the plans of such industrial projects as (1) forms, objects and structures in concrete, (2) economic utilization of various woods and lumber, (3) construction of objects of economic usefulness in metal, (4) skills in pipefitting and plumbing, (5) determining the economy of various electrical appliances, (6) economical repair of electrical appliances, etc. The student will be required to select his projects, furnish materials, make preliminary plans and sketches for them, and have these approved by the instructor. At the completion of each project in the laboratory the student will be carefully examined concerning the work he has done.

*Mr. Tate Mr. Brock

Voc. Ed. 64—Sports Organization and Promotion—Semester 2 (2 and 3) 3 cr.

Purpose: To aid the student in organizing and promoting wholesome sports appropriate for schools and colleges. *Principal Topics*: The content of a comprehensive sports program; sports as educational activities; the value of sports from the avocational angle in the present social order; the intramural program, the interscholastic program, and the playground program. Special attention is given to developing organizations that promote appropriate recreation for all, rather than the few.

Mr. Kirchner

*On leave 1940-1941.

Voc. Ed. 100—Special Problems in Education—Semesters 1 and 2 1-5 cr. (enrollment by individual permission.)

Purpose: To provide an opportunity for persons needing special assistance in meeting emergency or unusual situations in educational work.

Students who enter this course are required to provide their own transportation in connection with field work.

WEAVING AND DESIGNING

Mr. McKenna
Mr. Tarrant
Mr. Walters
Mr. Cartee
Mr. Williams
Mr. Pitts

W. D. 12—Textiles—Semesters 1 and 2 (1 and 2) 1 2/3 cr.

Purpose: To give the student a general background for the work which follows, and enable him to see the industry as a whole. *Principal Topics*: Elementary studies of weaving, designing, warping, and slashing. (*Beam Warpers, Slashers, Northrup looms*—International Textbook Company; *W. D. Mimeograph Notes.*)

Mr. Pitts

W. D. 21—Elementary Design—Semester 1 (2 and 0) 2 cr.

Suggested Preliminary Course: W. D. 12.

Purpose: To give thorough instruction in the construction of the fundamental weaves and their derivatives. *Principal Topics*: Plain, twill, and sateen weaves, derivatives, harness and chain drafts, principles of color harmony. (*Design Textbooks*—International Textbook Company; *W. D. Mimeograph Notes.*)

Mr. Tarrant

W. D. 22—Advanced Design—Semester 2 (2 and 0) 2 cr.

Prerequisite: W. D. 21.

Purpose: To instruct the student in constructing weaves for the more intricately woven fabrics. *Principal Topics*: Extra warp and filling for weight and figure, double cloths, velvets, plushes, corduroys, and turkish toweling. (*Design Textbooks*—International Textbook Company; *W. D. Mimeograph Notes.*)

Mr. McKenna Mr. Tarrant

W. D. 23—Weaving—Semester 1 (0 and 2) 2/3 cr.

Prerequisite: W. D. 12.

Purpose: To give the student thorough training in the operation, construction, and adjustment of loom mechanisms. *Principal Topics*: Analytical study of the loom, the shedding motion, design of shedding cams, the picking motion, the beating-up and the take-up motions; take-up calculations, let-off mechanisms, the filling stop motion, batteries, automatic loom adjustment, and practical loom fixing. (*Cam Loom Fixing*—Willis, Williams, Walters and Moore.)

Mr. Williams Mr. Walters

W. D. 24— Weaving—Semester 2 (0 and 3) 1 cr.

Prerequisite: W. D. 23.

Purpose: To give the student instruction in fabric production on the more advanced types of looms with special cams and attachments. *Principal Topics*: Mechanical and electrical warp stop motions, filling feelers, thread cutters, shuttle change mechanisms, selvage and side cam motions, loom fixing. (*Cam Loom Fixing*—Willis, Williams, Walters and Moore.)

Mr. Williams Mr. Walters

W. D. 25—Weave Room Problems—Semester 1 or 2 (2 and 0) 2 cr.

Prerequisite: W. D. 12.

Purpose: To apply the fundamental principles of mathematics to weave room problems. *Principal Topics*: Mechanical calculations of the loom, the theoretical and practical production of the loom, yarn, beam, and fabric calculations, loom equipment and slasher problems. (*Textile Mathematics*—Willis, Dunlap, Cartee and Moore.)

Mr. Williams

W. D. 31—Dobby Design—Semester 1 (2 and 0) 2 cr.

Prerequisite: W. D. 21.

Purpose: To give instruction in the derivation of the specifications and drafts necessary for the productions of fabrics on the dobby loom. *Principal Topics*: Ratio of intersections; methods of combining weaves; laying out weaves for figures, stripes, and checks, dressing and beaming plans; harness, reed, and chain plans. (*W. D. Mimeograph Notes.*)

W. D. 32—Advanced Dobby Design—Semester 2 (2 and 0) 2 cr.

Prerequisite: W. D. 31.

Purpose: To give the student training in designing the more advanced types of dobby-woven fabrics. *Principal Topics*: Weaving specifications for handerkerchiefs, clip-spot fabrics, double cloths, and composition of original dobby patterns. (*W. D. Mimeograph Notes.*)

MR. MCKENNA MR. TARRANT

W. D. 33, 34—FABRIC ANALYSIS—Semester 1 (0 and 2) 1 cr. Semester 2 (0 and 2) 1 cr.

Prerequisite: W. D. 12, (W. D. 21 and 22 suggested.)

Purpose: To give the student a thorough knowledge of the analysis of fabrics as they come to the mill for reproduction. *Principal Topics*: Methods of determining yards per pound from a small sample and from the yarn counts; overall and ground construction; selection of yarn counts; determining the design, drawing-in-draft, chain draft, and reed plan; warp dressing plan; cotton, wool, silk, and rayon fabric. (*W. D. Mimeograph Notes.*)

MR. CARTEE

W. D. 35—FANCY LOOM FIXING—Semester 1 (0 and 2) 2/3 cr.

Purpose: To give the student an understanding of the principles of operation, timing, and settings of the dobby and drop box looms. *Principal Topics*: A study of harness settings for various types of patterns; setting and timing of cylinder, knives, crankshaft, box motion, hooks, and chains; building box, pattern, and multiplier chains; weaving fabrics from original chains. (*Dobbies, Box Motions, Dobby and Dobby Multipliers; W. D. Mimeograph Notes.*)

MR. CARTEE MR. TARRANT

W. D. 36—FANCY LOOM FIXING—Semester 2 (0 and 2) 2/3 cr.

Prerequisite: W. D. 23 and 24 (W. D. 35, Suggested).

Purpose: To give practical instruction in the timing and setting of special motions used on dobby and box looms. *Principal Topics*: Double cylinder dobbies, rocking cylinder, two weave and center filling stop motion; automatic stationary magazines; four chain multipliers, warp striper, and feeler motion. (*Crompton and Knowles Bulletins; W. D. Mimeograph Notes.*)

MR. CARTEE

W. D. 37—RAYON PROCESSING—Semester 1 (1 and 2) 1 2/3 cr.

Prerequisite: Open to juniors and seniors in the Textile School.

Purpose: To instruct the student in the processes of rayon warp preparation and in the weaving of rayon fabrics. *Principal Topics*: Rayon yarns classified according to the processes used in their manufacture; physical properties of the rayons and their relation to processing; winding, warp, and slashing; sizing materials and formulae; rayon weaving. (*Rayon and Synthetic Yarn Handbook*—Schwarz; *W. D. Mimeograph Notes.*)

Mr. Pitts

W. D. 41—Jacquard Weaving—Semester 1 (1 and 2) 1 2/3 cr.

Purpose: To give instruction in the operation and mechanism of the Jacquard machine and complementary equipment. *Principal Topics*: Types of Jacquard machines, types and methods of harness building, designs for different tie-ups, card cutting and lacing, Jacquard machine fixing. (*Jacquards, International Textile Book Company; W. D. Mimeograph Notes.*)

Mr. McKenna

W. D. 42—Jacquard Design—Semester 2 (1 and 4) 2 1/3 cr.

Purpose: To give instruction in the design of fabrics of artistic value for decorative purposes. *Principal Topics*: Application of the principles of decorative design; derivation of original designs by the use of color, weave, and form; pattern enlargement; card cutting and lacing; sample weaving. (*W. D. Mimeograph Notes.*)

Mr. McKenna

W. D. 44—Leno Design and Warp Preparation—Semester 2 (2 and 0) 2 cr.

Prerequisite: W. D. 31, 33, and 34.

Purpose: To give the student thorough instruction in the practice of warp preparation and in the structure of cross-woven fabrics and the methods employed in their design and production. *Principal Topics*: Mechanism for leno weaving, simple leno fabrics, fancy leno on one set of doups, the slotted doup, three-end leno; full turn leno, advanced fabric styling, starches; sizes, slashing methods, warping machinery . (*Fundamentals of Leno Weaving*—Shinn and McKenna; *W. D. Mimeograph Notes.*)

Mr. McKenna

W. D. 45, 46—Pattern Weaving—Semesters 1 and 2 (0 and 2) 2/3 cr.

Purpose: To coordinate the principles taught in the fundamental courses of the Weaving and Designing Department. *Principal Topics*:

The student will be required to design and produce to specifications one fancy cloth each semester and submit reports covering the design and analysis. (*W. D. Mimeograph Notes.*)

MR. MCKENNA MR. WALTERS

W. D. 45.5, 46.5—ADVANCED PATTERN WEAVING—Semesters 1 and 2 (0 and 6) 2 cr.

Prerequisite: W. D. 31, 32, 33, and 34.

Purpose: This course is arranged especially for students in textile design with the objective of giving the student more time to apply the principles of design in the production of fancy fabrics. *Principal Topics*: The student will be required to produce two decorative fabrics of a complex nature each semester and submit reports covering their specifications, design, analysis, and manufacturing cost.

MR. MCKENNA

W. D. 48—KNITTING—Semester 2 (0 and 2) 2/3 cr.

Open to juniors and seniors in the Textile School.

Purpose: To familiarize the student with the principles of knitted fabric construction and hosiery production. *Principal Topics*: Knitting mechanisms, construction of knitted fabrics and hosiery, rib knitting, hosiery machinery, fancy knitting, sinker-reverse plating, the float and the welt stitch principle, hosiery analysis, material costs, labor costs, overhead costs, knitting calculations. (*W. D. Mimeograph Notes.*)

MR. CARTEE

YARN MANUFACTURING

MR. EATON

MR. DUNLAP MR. BLAIR MR. GAGE MR. CAMPBELL

Y. M. 11—THE TEXTILE INDUSTRY—Semester 1 or 2 (1 and 2) 1 2/3 cr.

Purpose: To introduce textile students to the industry through study and discussions on factory organization, the use of cleaning and spinning machines, nomenclature. *Principal Topics*: Brief history of the industry, relation of owners and management, economic importance of textiles. The laboratory is used to demonstrate each machine used in yarn manufacturing. Calculations of machine speeds, drafts, and waste explain the action of each machine and its parts and yarn numbering. (*Y. M. Mimeograph Notes.*)

MR. EATON MR. WILLIAMS MR. DUNLAP MR. GAGE

Y. M. 21—Pickers—Semester 1 or 2 (2 and 2) 2 2/3 cr.

Purpose: To give the student thorough knowledge of cotton opening, cleaning, and lap forming equipment. *Principal Topics*: Bale breakers, automatic feeders, lappers, cleaning trunks, beaters, evener motions, and measuring devices, calculations for drafts, production, waste, and speeds. (*Cotton Opening, Cleaning and Picking*—Willis and Moore.)

Mr. Blair

Y. M. 22—Cards and Drawing Frames—Semester 1 or 2 (2 and 2) 2 2/3 cr.

Purpose: To give the student thorough knowledge of revolving top flat cards and drawing frames as used in cotton manufacturing. *Principal Topics*: Settings, grinding, stripping, card clothing, calculations for card speeds, production, waste, and draft, metallic and covered top rolls, roll settings, all calculations and practice in operating both machines. (*Cotton Carding*—Willis and Moore; *Drawing Frames*—Willis and Moore.)

Mr. Gage Mr. Eaton Mr. Blair

Y. M. 24—Mill Problems—Semester 1 or 2 (2 and 0) 2 cr.

Purpose: To give a thorough foundation in arithmetic as applied to textile manufacturing. *Principal Topics*: Deals with problems in draft, twist, waste percentage, production, and machine organizations. (*Textile Mathematics*—Willis, Dunlap, Cartee and Moore.)

Mr. Dunlap Mr. Campbell

Y. M. 28—Cotton Grading—Semester 1 or 2 (0 and 2) 2/3 cr.

Purpose: To teach the fundamentals of cotton classing according to U. S. Government Standards for grades and staples. *Principal Topics*: Stapling, classing, and valuing all grades of cotton raised in U. S.; methods of ginning, marketing, and handling cotton; contracts and claims. (*Cotton Classing Manual*—Willis, Gage and Moore.)

Mr. Gage Mr. Blair

Y. M.31—Roving Frames—Semester 1 or 2 (2 and 2) 2 2/3 cr.

Purpose: To give complete information on the construction and operation of fly frames. *Principal Topics*: Drafting, twisting and winding on slubbers, intermediates, and Jack frames; production, rolls, spindles, and flyers, differential motions and cones, twist per inch, sizing roving, all calculations for these topics. (*Roving Frames*—Willis, Eaton and Moore.)

Mr. Eaton

Y. M. 34—Spinning, Spooling, and Twisting—Semester 1 or 2 (2 and 3) 3 cr.

Suggested Preliminary Course: Y. M. 31.

Purpose: To give thorough knowledge of cotton yarns and their manufacture on ring spinning frames, winding, spooling, and twisting machinery. *Principal Topics*: Machine construction, functions of all parts, calculations for draft, twist, doubling, and constants; wet and dry twisting, rings, and travelers. (*Cotton Spinning*—Willis, Dunlap and Moore.)

Mr. Dunlap

Y. M. 42—Combers, Sliver and Ribbon Lappers—Semester 2 (1 and 2) 1 2/3 cr.

Purpose: To study settings and adjustment of the comber and its preparatory machines, and the value and use of its product. *Principal Topics*: Timing and setting comber for various staples and required waste, production and all other calculations, management, and operation of these machines. (*Cotton Combing Manual*—Willis, Blair and Moore.)

Mr. Blair

*ZOOLOGY**

Mr. Sherman

Mr. Dunavan Mr. Ware

Zool. 12—General Zoology—Semester 2 (2 and 4) 3 1/3 cr.

Purpose: For general science and pre-medical students. To give the student a thorough training in the characteristics, life-histories, and habitats of the principal animal forms. *Principal Topics*: Physiology of living cells, animal environment, cell division, maturation, reproduction, genetics, observation and study of representatives of the principal animal phyla. (*Textbook of General Zoology*—Curtis & Guthrie; *Laboratory Directions in General Zoology*—Curtis & Guthrie.)

Mr. Ware

Zool. 21—General Zoology—Semester 1 (2 and 2) 2 2/3 cr.

Purpose: For students in agriculture. To familiarize the student with the characteristics, life-histories, and habits of the common types of animals. *Principal Topics*: Physiology of cells, animal environments, cell division, reproduction; observations and study of representative

*See also Entomology. Students who major in the Entomology and Zoology Department are required to take several courses in Entomology in addition to those listed under Zoology.

animals; special emphasis on agricultural phases of the subject. (*Textbook of General Zoology*—Curtis & Guthrie; *Laboratory Directions in General Zoology*—Curtis & Guthrie.)

Mr. Dunavan Mr. Ware

Zool. 33 and 34—Advanced Zoology—Semesters 1 and 2 (2 and 2) 2 2/3 cr.

Prerequisite: Zool. 12 or 21.

Purpose: To give advanced training in zoological principles and characteristics of animal forms as a basis for later graduate study. *Principal Topics*: Histology, embryology, ecology, distribution, and economic relationships of vertebrate animals, characteristics of all vertebrate groups.

Mr. Ware

Zool. 48—Introduction to Game Management—Semester 2 (2 and 0) 2 cr.

Prerequisite: Zool. 12 or 21.

Purpose: To present the subject of Game Management with special reference to game mammals and game birds. *Principal Topics*: Game mammals, birds and fishes of South Carolina and of the United States with reference to conservation and recreation. (No textbook required. Reference works to be used: *Game Management*—Leopold; *The Bob White Quail*—Stoddard; publications of U. S. Bureau of Biological Survey and Bureau of Fisheries.)

Mr. Sherman

PART VI—PUBLIC SERVICE

*THE SOUTH CAROLINA AGRICULTURAL EXPERIMENT STATION**

The Agricultural Experiment Station of South Carolina is a department of Clemson College. The experiment station at present consists of the main station, which is located at Clemson, and five sub-stations: one at Summerville, in the coastal plain region; one at Florence, in the Pee Dee section; one at Pontiac, near Columbia, in the sand hill region; one in the trucking section near Charleston; and one in Barnwell county in the melon-growing area. The main offices and laboratories of the station are located on the Clemson College campus, while the station experiment farm, consisting of about 200 acres, is east of and adjoining the college campus. The investigations dealing with the fundamental principles of agricultural sciences and with the application of such principles to practical agricultural operations are carried on in the laboratories and on the experiment station farm at Clemson. The experiments looking to the adaptation of such scientific data accumulated here and elsewhere to the conditions peculiar to certain sections of the State are carried on at the sub-stations and at branch laboratories established in certain sections of the State for this purpose.

It is the aim of the experiment station to conduct research work on problems which have a direct practical bearing on the agriculture of the State. With this end in view extensive experiments relative to the best methods of procedure under various conditions with the principal plants and animals have been undertaken. Economic and social problems are likewise being investigated. As progress is made the results obtained are given out to farmers in the form of bulletins, circulars, and personal letters. Since the establishment of the station, 324 such bulletins and sixty circulars have been published, covering practically all phases of agriculture.

Aside from the research work and the publication of results obtained from such research, the experiment station performs

*The experiment station staff is given on page 20.

various other duties. Among these might be mentioned the entomological and pathological inspection work (which aims to protect the farms, orchards, and gardens of the State against the introduction of injurious insects and diseases); the biological and soil survey of the State, and the cooperative experimental work carried on with hundreds of farmers in the State. The technically trained experts of the station staff are regarded as authorities in their several specialties, and they are constantly giving out information relating to the various lines of agricultural endeavor. The station staff also aids in disseminating agricultural knowledge by cooperating with the Extension Service of the College in holding agricultural meetings and conferences and by meeting with the farm demonstration agents and giving to them technical information which they in turn carry direct to the farmers.

Close cooperation is maintained with the various research bureaus of the United States Department of Agriculture and with the departments of the College. The laboratories are always open to the inspection of the students and other people of the State. The same is true of the experiment station farm. There is always opportunity for a limited number of students to secure work in the various divisions of the station and to assist in the research work carried on by the members of the station staff.

Home economics research is carried on in cooperation with Winthrop College at Rock Hill. This work is designed to secure additional information on economic, social, and health factors influencing the home and living conditions of rural people.

Close cooperation is maintained between the home economics research department, the teaching and extension workers in this field, and the clubs and societies engaged in the promotion of better rural homes.

A full report of the work and expenditures of the Experiment Station is published annually and this report and all other publications of the station are free and will be sent on request. (Requests for these should be addressed to the Director, Agricultural Experiment Station, Clemson, S. C.)

FERTILIZER INSPECTION AND ANALYSIS

The work of fertilizer inspection and analysis is under the supervision of the Fertilizer Board of Control consisting of a Committee of the Board of Trustees. The work of inspection and analysis is a department of the Agricultural Experiment Station. District Inspectors are located in different parts of the State. Their duties are to collect official fertilizer samples for analysis and check on the tagging and labelling of all fertilizer material.

The chemical work consists of the analysis of commercial fertilizers as provided for by the Fertilizer Law of the State. This Department also undertakes the analysis of waters, ores, minerals, and other naturally occurring materials, portions of human bodies in cases of suspected poisoning (as provided for by law), and the analysis of home-mixed fertilizers. All the work of this Department is done without charge.

*THE AGRICULTURAL EXTENSION SERVICE**

The agricultural extension work of the College is carried on by the Extension Service in cooperation with the United States Department of Agriculture. The work is supported by federal, state, and county appropriations. The main development of extension work has come since the inactment of the Federal Smith-Lever Act of 1914. The purpose of extension work is to diffuse among farm people useful and practical information on subjects related to agriculture and the farm home, and, through demonstrations and other practical methods, to stimulate the application of such information by farm people.

Agricultural Extension Work:—Under an Act of the Legislature in 1929, each county in the state has a county farm agent. These agents are agricultural college graduates who have had practical farm experience. They devote their time to the development of the agriculture of their respective counties through farm visits, demonstrations, personal conferences, meetings, community organizations, publications, letters, and otherwise. A staff of ex-

*The extension staff is given on pages 24 to 28.

tension specialists representing the important lines of agriculture in the state assists the county agents in planning and carrying out the extension program.

Home Demonstration Work:—While home demonstration work is a part of the cooperative program of extension work under the Smith-Lever Act, and is under the general direction of the Extension Service, this work is conducted under the immediate supervision of Winthrop College. Every county is provided with a home demonstration agent by legislative enactment, and these agents conduct educational demonstration work with farm women and girls in the production, preparation, and conservation of the family food supply, home marketing, home improvement, clothing, home furnishings and home management, nutrition, community organization, and other farm home activities.

Negro Demonstration Work:—Nineteen negro agricultural agents and seventeen negro home demonstration agents are employed to work with negro farmers of the state in counties having large negro populations. These agents are employed in cooperation with the State College at Orangeburg, where the supervising agents for this work are located.

Agricultural Economics and Farm Management:—The extension program in agricultural economics and farm management is directed toward a wider dissemination among farm people of economic information, including the results of research work and farm experience, that may be useful to them in planning and conducting their farm businesses. This program includes outlook and economic information, the analysis of farm and home accounts and enterprise records on crops and livestock, kept by farm people with the aid of extension workers, county program planning work, land use planning work, and other activities in this field.

Agricultural Engineering:—Extension work in agricultural engineering includes mainly educational work with farm people in the proper terracing and drainage of farm lands, the efficient use of farm machinery and equipment, plans for farm buildings and other farm structures, improved cotton ginning methods, the utilization of electric power on the farm, and farm water systems.

Field Crops:—Extension work with farm people on field crops includes educational demonstration work in the efficient production of high quality cotton, corn, tobacco, small grains, summer and winter legumes, hay crops, and other crops that are of importance to South Carolina farmers as sources of income and also food and feed.

Livestock:—Extension work in this project includes demonstrations in efficient livestock production, including the use of pure-bred sires, hog-feeding demonstrations, swine sanitation demonstrations, beef cattle, sheep and mule production, cooperative marketing of livestock, 4-H pig and beef calf club work, and the preservation of the farm meat supply.

Dairying:—Extension work in dairying includes work with farm people in placing and encouraging the use of purebred sires, dairy herd management, care and handling of milk, pastures and feed production, 4-H dairy calf club work, the marketing of dairy products and dairy cattle, the use of dairy equipment, and the feeding and management of the family cow.

Crop Insects and Diseases—Crop insects and diseases take a heavy toll on the farms of South Carolina every year. The extension program in this line includes educational demonstration work in the prevention and control of crop diseases, crop insects, and work with beekeepers.

Forestry:—The extension program in farm forestry is directed toward the conservation, proper utilization, and efficient marketing of the farm forestry resources in the state. This program includes educational demonstration work in reforestation, thinning, pruning, selective cutting, fire protection, and timber estimating.

Boys' 4-H Club Work:—Agricultural clubs of farm boys are organized for the purpose of enlisting the intelligent interest of the boys and their parents in improved methods of agriculture. This program includes the organization of 4-H clubs, supervision of 4-H club demonstrations of crops and livestock production and checking the results, training 4-H judging and demonstration teams, leadership, and citizenship training, and holding 4-H club camps, tours, and recreational meetings.

Horticulture:—Extension work with farm people along horticultural lines includes mainly demonstration work in home orchard establishment and management, commercial peach and apple production, home gardens, the production of commercial truck crops, and sweet potato production. The emphasis is placed upon the efficient production of quality products for both home use and for the market.

Marketing:—Since the efficient marketing of farm products cannot be wholly separated from production, much of the time of all extension workers is devoted to assisting farm people with their marketing problems. This program includes assistance in the organization and operation of cooperative marketing associations, cooperation with auction markets, supervision of the federal-state shipping point inspection service for fruits and vegetables, demonstrations in grading and packing farm products, all of which is connected with the work of the Extension Service in aiding farm people to produce the varieties and quality of farm products that can be sold on the markets in this state and in other states.

Poultry:—The extension program of poultry demonstration work includes demonstration poultry and turkey flocks, the brooding and rearing of chicks, disease and parasite control, the construction of poultry houses and the use of poultry equipment, the development of poultry breeding flocks, 4-H poultry club work, and the marketing of surplus poultry and eggs from the farms of the state.

Publications and News:—The extension program of publications and news includes the preparation, editing and distribution of agricultural bulletins, news material and circulars, both from the College, and from the offices of the county agents and home demonstration agents. Mimeographed news articles and special news stories of agricultural interest are supplied to the newspapers of the state, and to the Associated Press. Monthly letters or printed circulars on poultry, orchards, gardening, dairying, and boy's 4-H club work are mailed free of charge to those persons especially interested in these subjects. Bulletins covering the important lines of farm activity in the state are prepared and made available to farm people who desire such information.

Visual Instructions—The extension program of visual instruction includes the production and showing of educational motion pictures, film strips, and slides on agricultural and home economics subjects, and the production of photographs, charts, maps, and other visual educational material.

Other Activities:—The Extension Service represents the Clemson Agricultural College, which is the Land Grant College of the state, in conducting the educational work among farm people in connection with the agricultural programs of the federal government, such as the Agricultural Adjustment program, the Soil Conservation program, Farm Credit, and others. In addition, such emergency programs as the cotton mattress program, the organization of agriculture for national defense, and other emergency programs of this nature are organized and conducted by the Extension Service.

THE ENGINEERING EXPERIMENT STATION

A majority of the Land Grant Colleges of the United States have established engineering experiment stations, and these have proved of great value in aiding industrial and engineering developments in the various states.

The engineering experiment station of the Clemson Agricultural College was established by the Board of Trustees in July, 1924.

Its purpose is to aid the present industries in the state, to do research work on the material resources of the state with a view of leading to the establishment of new industries, to study methods of utilizing waste products, etc.

In addition to serving the industries of the state and helping to solve engineering problems for the agricultural interests, it is hoped, in cooperation with the stations of other states, to add to the store of scientific and engineering knowledge. The staff consists of well-trained men from the various schools and departments of the college. The laboratories of the several departments of engineering, as well as others, are available for the use of the station in its investigation.

The results of all investigations are to be published in the form of bulletins and circulars to be distributed free to all who may be interested. Copies of publications may be secured by applying to the Director of Engineering Experiment Station, Clemson, South Carolina.

RESEARCH IN EDUCATION

While members of the Education staff have conducted a number of research projects in the past, no definite research organization for educational research existed prior to 1936, at which time the research activities of the School of Vocational Education were organized. A grant from the General Education Board and the support of the college made possible the initiation of this program. Provisions were made for cooperative research in Vocational Agriculture with the State Supervisor of Agriculture in the expansion of that work under the George-Deen Act. When the largest single expenditure of funds is involved, and when the largest number of any single enterprise is involved, it seems but natural that progressive educational programs should include a comprehensive effort in research. Clemson hopes through this work to help advance the cause of education along appropriate lines.

*LIVESTOCK SANITARY WORK**

The Clemson College Live Stock Sanitary Office is a department of Clemson College and is under the supervision of the Agricultural Committee of the Board of Trustees. This office is located in the John C. Calhoun State Office Building, Columbia, S. C., in order that the best interests of the livestock industry may be served, and is in charge of the State Veterinarian, Dr. W. K. Lewis, who is also Director of this Department.

The principal objectives of this office are tick eradication, tuberculosis eradication, hog cholera control, and Bang's Disease elimination. In addition to these, all reported outbreaks of contagious, infectious, and communicable diseases of livestock and poultry are investigated and measures recommended for their con-

*Livestock Sanitary Work staff is given on page 23.

trol and eradication; and quarantine is maintained against the introduction of diseased livestock into the State.

The Columbia office has a fully equipped laboratory for bacteriological, pathological, and serological work, in order that proper and prompt diagnosis of certain diseases may be made. Parasitic research work will be conducted in various sections of the State in cooperation with the Columbia laboratory.

In addition to the force of veterinarians working with the Columbia office, Assistant State Veterinarians are located at strategical points in the State in order to be readily available to all farmers.

On July 1, 1940, thirty-four practicing veterinarians of the State were commissioned as Deputy State Veterinarians, to assist the State Veterinarian in the control and eradication of contagious and infectious diseases of livestock. The Deputy State Veterinarians are stationed principally in the northern and eastern sections of the State, so these together with the Assistant State Veterinarians in the middle and southern sections of the State, enable the Clemson College Live Stock Sanitary Office to render a service to the livestock industry of the State in keeping with its development and maintain the service at the highest degree of efficiency.

The Clemson College Live Stock Sanitary Office also maintains equipment for handling large stocks of anti-hog-cholera serum, virus, and veterinary biologics, and furnishes these products to the citizens of the State at cost, thereby effecting a saving to them of several thousands of dollars annually.

The live stock sanitary work is required by legislative enactment and is supported by legislative appropriations.

The Bureau of Animal Industry, U. S. Department of Agriculture, cooperates in tick eradication, tuberculosis eradication, hog cholera control, and Bang's Disease elimination, and appropriates funds in addition to the State appropriation for these objectives.

MISCELLANEOUS PUBLIC SERVICE

Entomological and Pathological Inspection.—This work is carried on under the direction of the State Crop Pest Commission. The State Entomologist and the State Pathologist have charge of this work under the commission.

The work of these officers consists in the control of contagious plant diseases and insect pests. Supervision of all nursery stock sold within the State is a duty of the Crop Pest Commission.

A permit tag issued by the State Crop Pest Commission should be attached to every package of nursery stock, seed, or plants offered for sale or shipment for planting purposes.

Textile Testing.—The textile department maintains a yarn testing service for the cotton mills of South Carolina.

Textile Research.—Clemson in cooperation with the Bureau of Agricultural Economics of the United States Department of Agriculture conducts manufacturing tests of grades, staples, and varieties of cotton. Valuable reports based on this work are issued from time to time. Copies of these reports may be acquired by addressing either the College or the Bureau of Agricultural Economics, Washington, D. C.

Service to Textile and Other Industrial Teachers.—The College in cooperation with the State Department of Education is glad to assist those who teach night schools by supplying a trained man to assist in the work of organizing classes, organizing courses of study, making plans for teaching evening classes, and actually teaching vocational subjects. Requests for information regarding this service should be addressed to Professor L. R. Booker, Itinerant Teacher Trainer, Industrial Education Department, Clemson, S. C.

Agricultural Follow-up and Itinerant Teacher Training.—The members of the staff of Agricultural Education visit all beginning teachers for the purpose of assisting them on the job and also for the purpose of collecting information which may

prove helpful in improving the work of teacher training at the College.

Research in Vocational Agricultural Education.—A research program has been inaugurated in the Department of Agricultural Education as one of the six functions of teacher training. This work is being done in cooperation with the State Department of Education. The state supervisors of agricultural instruction and the teacher trainers have adopted, as the purpose of research work at the present time, the promotion of better instruction in vocational agriculture in the public schools of the State.

State Vocational Agricultural Judging Contest:—The Clemson Agricultural College, cooperating with the State Department of Education, conducts annually a judging contest for students of vocational agriculture. The two schools ranking highest in the contest in 1940 were: First, Central, F. E. Kirkley, coach; and second, Fort Mill, R. F. Palmer, coach. Desportes Smith of Fort Mill was awarded a prize as the highest individual contestant. The following teams won first places: Judging hogs and mules, Rock Hill; judging all classes of poultry, Harleyville; judging crops, Central; judging horticultural products, Clio. The Rock Hill School contestants won first place in judging general livestock and were given a trip to Kansas City to represent the State in the Vocational Students' Judging Contest at the American Royal Livestock Show.

State-wide Industrial Education Contest.—A state-wide Industrial Education contest was inaugurated by Clemson College and the State Department of Education in 1935. This contest has been open to all public schools teaching Industrial Education. The contest includes competition in woodworking, drawing, textiles, and toolcraft. The rules are outlined by members of the faculty representing those departments involved in the competition. Many valuable prizes are given each year to individuals and teams who participate in the contest. The greatest value is the interest created in craftsmanship on part of contestants. Any school may receive announcements concern-

ing the contest by writing Department of Industrial Education, Clemson, S. C.

Publications.—The Agricultural Education staff in cooperation with the State Department of Education publishes a mimeographed bulletin which is used by teachers of vocational agriculture in the public schools of the State. The contents of this bulletin consist largely of the results of experimental work in agriculture. There are a number of issues of Agricultural Education Bulletins which are available. A list of these will be furnished upon request to the Department of Agricultural Education.

SUMMER EDUCATIONAL ACTIVITIES

During the summer, various activities are organized to serve the needs of special groups of students and others. The activities undertaken in the summer of 1940 included the following:

Summer School	June 10-July 20
Reading Clinic	June 10-June 15
Guidance Clinic and Conference	July 16, 17, & 18
Public School Trustees Meeting	August 15
Opportunity School	July 20-August 17
Poultry Short Course	August 29-30
Dairy Short Course	August 7-9
Beekeepers Short Course	August 28-29
WPA Summer School	July 22-August 17
National Defense Program	July 15-September 7

THE CLEMSON COLLEGE SUMMER SCHOOL

The Clemson College Summer School provides an opportunity for Clemson and other college students to take advanced courses and hasten graduation, to take special work not offered during the regular session, or to make up back work for time lost on account of illness. It also provides opportunity for high school graduates to "test" their interest and ability in college work at a very nominal cost.

Education courses anticipated for 1941 include primary, elementary, junior high, secondary, vocational and special courses. There has been an unusually strong demand for teachers prepared at Clemson.

The following courses of study were offered during the 1940 Summer School. An announcement of the 1941 program may be secured in the spring by addressing either G. E. Metz, Registrar or W. H. Washington, Dean, Clemson College Summer School, Clemson, South Carolina.

SUMMER SCHOOL COURSES

June 10-July 20

1940

Dept. & No. of course	Title	Instructor	Credit
Ag. Ec. 100a	Cooperatives, Farm* (2-5MT)	Ferrier	1⅓
Agr. 20	Soils (2-4MWF)	Collings	2⅔
Agr. 31	Fertilizers	Collings	2
Agr. Engr. 23s	Agr. Mechanics*†† ($1)†	McAdams	2
Agr. Engr. 38	Soil Conservation	McAdams	2
A. H. 31	Feeds and Feeding	Starkey	3
A. H. 47s	Farm Family Milk & Meat Supply* (2-5MT)	LaMaster and Starkey	1⅓
Arch. 11-42	Design (See instructor)	FitzPatrick	Ar
Arch. 40.5	Hist. of Painting	FitzPatrick	2
Bact. 31	Gen. Bacteriology (2-5MWF)	Aull	3⅓
Bot. 11	Gen. Botany (2-6MWF)	Rosenkrans	3⅓
Chem. 11	Gen. Chem. (12MWF) ($0.50)	Hunter	3⅔
Chem. 12	Gen. Chem. (12TTh 2M) ($0.50)	Hunter	3⅔
Chem. 28s	Organic Chem. (2-6TTh) ($0.50)	Mitchell	4
Chem. 33s	Quantitative Analysis ($0.50)	Mitchell	2⅔
C. E. 47	Reinforced Concrete Design	Dougherty	2
Draw. 11, 12, 25	F. H. & Mech. (See instr.)	FitzPatrick	Ar
Econ. 23	Principles of Economics	Ward	2
Econ. 24	Principles of Economics	Ward	2
Econ. 104	Industrial Management	Ward	3
Ed. 20.1s	Primary Reading	Sharpe	2
Ed. 21.1s	Observ. & Pract. Tchg. ($1.00)	Sharpe	2
Ed. 21.2s	Centers of Interest	Sharpe	2
Ed. 27.5s	Assembly & Special Programs	Holleman	2
Ed. 28.7s	Tchg. Music in Integrated Prog.	Holleman	2
Ed. 29.1s	Tchg. of Arith. in Upper Grades	Holleman	2
Ed. 31s	Centers of Interest, Int. Grades ($1.00)	Willson	2
Ed. 38	Educational Psychology	Tate or Bostick	3
Ed. 39	Principles of Secondary Ed.	Tate or Bostick	3
Ed. 40a, b, c	Elementary Education ($1.00)	Holler, Ott, DesChamps, Finlayson, Shirley	6
Ed. 41	Arts & Crafts for Grade Teach. ($1.00)	Willson	2
Ed. 42a, b, c	Supervising Elementary Instr. ($1.00)	Holler, Ott & Staff	2-6
Ed. 45s	Reading, Remedial	Geiger, et al	1
E.E. 35, 35a	Elect. Mach.	Credle	2⅔
E.E. 36, 36a	Elect. Mach.	Credle	3⅔
E.E. 43, 43a	A. C. Machinery	Credle	4
Eng. 15	Comp. & Am. Lit.	Bradley or Lane	3
Eng. 16	Comp. & Am. Lit.	Kinard or Lane	3
Eng. 21	Major Poets, Age of Romanticism	Kinard or	2
Eng. 22	Major Poets, Victorian Age	Lane	2
Eng. 24s	Children's Literature	Willson	2
Eng. 31	Public Speaking	Bradley	2
Eng. 32	Business Law	Bradley	2
Eng. 54	Modern Drama	Lane	2 or 3
Eng. 57	Selected Masterpieces	Kinard	2
French 11s or 12s	Beginner's French§	Rhyne	2
French 21s or 22s	Second Yr. French§	Rhyne	2
German 11s or 12s	First Year German§	Rhyne	2
Govt. 12	Am. Govt. & Political Parties	Holmes	2 or 3
Hist. 42	The Develop. of South Carolina	Holmes	2
Hist. 14	Am. Econ. & Social Hist.	Holmes	2
Ind. Arts 55s	Advanced Woodwork	Marshall	2
Ind. Arts 56s	Proj. in Woodwork	Marshall	2
Ind. Arts 57s	Ind. Arts for Teachers	Marshall	2
Ind. Arts 58s	Woodfinishing	Marshall	2
Lib. Sci. 40s	Book Selection	Graham & Goodman	2
Lib. Sci. 42s	Ref. & Bibliography	Graham & Goodman	2
Lib. Sci. 46s	Serials & Circulation	Graham & Goodman	2
Math. 11	Plane Trigonometry	Hunter or Martin	3
Math. 12s	Anal. Geometry	Hunter or Martin	3
Math. 13, 14	College Algebra	Hunter or Martin	4
Math. 15	College Algebra	Hunter or Martin	3
Math. 21	Differential Calculus	Hunter or Martin	5

Math. 22—Integral Calculus	Hunter or Martin	5
Math. 23—Differential Calculus	Hunter or Martin	3
Math. 24—Integral Calculus	Hunter or Martin	3
Math. 27—Same as Math. 21; Math. 28—Same as Math. 24		
Phys. 11—Gen. Phy. (9MWF, 2-4TWTh)	Hendricks	3⅔
Phys. 12—Gen. Phy. (9MWF, 2-4TWTh)	Hendricks	3⅔
Phys. 21—Gen. Phy.	Brown	4
Phys. 22—Gen. Phy.	Brown	4
Phys. 23 & 24—Lab. Phy.	Brown or Hendricks	1
Spanish 11s—Beginner's Spanish (Also open to those desiring no credit)	Clark	2
Spanish 21s—Intermediate Spanish	Clark	2
Soc. Sci. 41s—Ind. Sociology	Booker	2
Typewr. 1—Jr. & Sr. H. S. Typing (Tuition $8)‡	Hudgens	0
Typewr. 30s—Typewr. & Office Procedure	Hudgens	3
Typewr. 40s—Adv. Typewr.	Hudgens	3
Voc. Ed. 33—Org. of Courses of Study	Brock	3
Voc. Ed. 35s—Tchg. of Art Metal Work	Brock	2
Voc. Ed. 90rc—Teaching of Cosmetology*	Wall	2
Voc. Ed. 91rc—Cosmetic Hygiene* (see catalog)	Wall	2
Voc. Ed. 98r—Auto Mechanics	Lombard	2
Voc. Ed. 110s—Meth. Teach. Producing and Canning Farm Food Supply (2-5WTh)	Stribling & Others	1⅓
Voc. Ed. 111—Meth., Farm Poultry (2-5WTh	Johnson	1⅓
Voc. Ed. 112—Course Building	Crandall	1⅓
Voc. Ed. 122r—Research in Ind. Ed.	Turner	2
Voc. Ed. 123rs—Supervision and Administration of Trade Schools & Depts.***	Adams & Turner	2
Voc. Ed. 125rs—Voc. & Ed. Guidance*	Jones	2
Voc. Ed. 126r—Coordination of Voc. Ed. Prog.	Booker	2
W.D. 12—Gen. Textiles (Tuition $8)†	McKenna	⅔
W.D. 21s-22s—Design	McKenna	2
W.D. 23s-35s—Plain & Fancy Loomfixing ($8)†	McKenna	⅔
W.D. 31s—Dobby Design	McKenna	2
W.D. 33—Fabric Analysis (Tuition $8)	McKenna	1

Note: Math. 17, 18, 21, 22 & Phys. 27 and 29 may be scheduled. See instructor.
*June 10-June 29.
**Extra hours given in parenthesis following title. Ar—Additional hours as arranged.
***July 1-20.
†Laboratory and materials fees are given, where charged, in parenthesis following title of course.
§See Dr. Rhyne before June 10.
‡If taken alone $10.00.
§§Five Sem. Cr. Math. May require instruction after July 20.
††July 22 to Aug. 17—Ag. Engr. 23 if enrollment justifies. Apply before July 15.
Opportunity School July 20-Aug. 17. For information write Miss Wil Lou Gray. Columbia, South Carolina.

PART VII—STUDENT REGISTER

GRADUATES OF 1940

DEGREES CONFERRED, FEBRUARY 6, 1940

School of Agriculture

Bachelor of Science Degree

Agriculture—Agronomy Major

James Carlyle Williams _____ Norway

Agriculture—Animal Husbandry Major

David Thomas Joyce _____ Greenwood

Agriculture—Horticulture Major

Robert Reid Bolt _____ Simpsonville

School of Engineering

Bachelor of Science Degree

Architecture

*Clifford LeRoy Coleman _____ Wilmington, Del.

Bachelor of Electrical Engineering Degree

Laurens Elliott McAlpine _____ Union

School of General Science

Bachelor of Science Degree

General Science

Philip Hunter McCorkle _____ York Robert Wyman Moss _____ Charleston

Pre-Medicine

Arthur Victorieus Williams, Jr. _____ Charleston

School of Textiles

Bachelor of Science Degree

Textile Engineering

William Deal Anderson, Jr. _____ Gastonia, N. C. Thomas Max Champion _____ Union

Weaving and Designing

Charles Cleon Moon _____ Spartanburg

School of Vocational Agricultural Education

Bachelor of Science Degree

Vocational Agricultural Education

Arthur Jacob DeLoach _____ Scotia Gilmer Lee Snipes _____ Townville
James Barr Dreher _____ Columbia Eugene Ross Stewart ____ Fountain Inn

* With honor.

Education

Palmer McCullough Dulin—Badin, N. C.

Industrial Education

Edward Kirby Lominack ____ Newberry

DEGREES CONFERRED JUNE 3, 1940

SCHOOL OF AGRICULTURE

Bachelor of Science Degree

Agriculture—Agricultural Economics Major

Robert Lee Ariail, Jr. ____ Sylva, N. C.
Clarence Aubrey Vincent, Jr.—Lynchburg

Agriculture—Agronomy Major

Jesse Marvin Baker _____ Hemingway
Lin Shecut Bozard _____ Cameron
Fred Gerrard Dobbins _____ Townville
*Dan Henry Gambrell _____ Seneca
Jason Cornelius Hardee _____ Loris
Marvin Douglas Kirby __ Timmonsville
John Harold Lightsey _____ Fairfax
George William McClure Franklin, N. C.
*Drake Harden Rogers _____ Blenheim
Mark Carlisle Shealy _____ Batesburg
Robert Clifton Shelley _____ Marion
Glenn Wise Shuler _____ St. Matthews
Richard Craig Wannamaker _____ St. Matthews

Agriculture—Animal Husbandry Major

William Cecil Bryan, Jr. _____ Fairfax
Robert Hoy Caughman _____ Leesville
Wilbur Lamar Eidson _____ Ward
William Snowden Gaillard, Jr. Eutawville
Beauregard Dudley Jeffcoat __ Florence
James Coskrey Lemmon ____ Winnsboro
*Samuel Fraser Reid _____ Fort Motte

Agriculture—Dairy Major

Lewis Roberts Arrington __ Ninety Six
Edgar Robert Fenstemacher _____ Hudson, Mich.
Judson Frederick Gray __Franklin, N. C.
Herbert Alfred Johnson _____ Aiken
William Epps Pugh _____ Kingstree

Agriculture—Entomology Major

Bruce McDuffie Heniford _____ Loris
Albert Allen Weathersbee __ Columbia

Agriculture—Horticulture Major

William Lawrence Jackson ____ Camden
John Boyce McClure, Jr. ____ Anderson
Frederick Wilbur Thode ____ Walhalla
Nathan Loughborough Turner, Jr. ____ White Hall

Agricultural Engineering

Richard Hartwell Bryant ____ Florence
Julian Spencer Dixon ____ Bishopville
Roland Leroy Hearon ____ Bishopville
William Harris Manning, III __Barnwell
William Jordan Oates _____ Chester
Joseph Fletcher Stribling—Westminster
Herbert Eugene Ward ____ Darlington

SCHOOL OF CHEMISTRY

Bachelor of Science Degree

Chemistry

Charles Raymond Carson ____ Anderson
Theodore Rhett Harley ____ Hartsville
Reid Baker Huff _____ Charleston
*George Samuel Irby _____ Woodruff
Crawford Bryan Lawton _____ Fairfax
Colin Hubbard McLaurin—St. Matthews
*William Amme Mappus __ Charleston
Daniel Francis Moorer ____ St. George
William Bernard Sharpe __ Orangeburg
Charles Clough Thornton _____ Union
Benjamin Hall Yarborough __Winnsboro

* With honor.

School of Engineering

Bachelor of Science Degree

Architecture

Henry Elbert Avent ____ Bennettsville
*Tebee Padgett Hawkins _____ Lincolnton, N. C.
Gilmore Stevens Moore ____ Rock Hill
Hord Stubblefield, Jr. _____ Greenwood

Chemical Engineering

Jesse Charles Crumbley, Jr. __Charleston
Robert Graham Forsythe, II __ _____ Hendersonville, N. C.
James Blanding Jones _____ Buffalo
Karl William Kolb ____ Savannah, Ga.
Charles Edward Littlejohn, Raleigh, N. C.
Garvin Carr McMakin _____ Wellford
Richard Tofilus Mazinski, _____ Jersey City, N. J.
Flournoy Jasper Mulling, Jr. _____ Savannah, Ga.
Merton Carlyle Propst, Jr. _____ Charlotte, N. C.
William Porter Quantz ____ Rock Hill
Allen Wightman Sanders, Jr. _____ Savannah, Ga.
Daniel Townsend Smith, III __ Abbeville

Bachelor of Civil Engineering Degree

Thomas Andrew Able, Jr. ____ Abbeville
Charles Bernise Bryan __ Johns Island
Augustine Cates Commander Florence
Everett Francis Croxson, Jr. _____ Charlotte, N. C.
*Raymond Miller Gillespie ____ Seneca
Laurens Garlington Gilliam ____ Union
Thomas Paul Grimball, Jr.__Johns Island
Jacob Roland Harrison _____ Abbeville
Sidney Tison Keel ____ Mulberry, Fla.
James Stuart Land _____ Columbia
*John Richardson Liles__Charlotte, N. C.
Samuel Benjamin Whitby McGowan __ Aiken
*Robert Wardlaw Moorman __ Clemson
Francis John Perna __ Riverside, Conn.
James Vernon Phillips, Jr. __ Gaffney
Alexander Howard Pregnall, Jr. _____ Charleston
George Harold Rea ____ Bethlehem, Pa.
Richard Palmer Reagan _____ Weaverville, N. C.
Philip Franklin Rivers _____ Aiken
Albert Dinkins Sutton _____ Fort Mill
Beekman Lee Webb _____ Beaufort

Bachelor of Electrical Engineering Degree

Frank Fleetwood Bateman __ Columbia
William Homer Bethea _____ Marion
Harry Lee Cook _____ Owings
Thomas Hugh Cox, Jr. __ Calhoun Falls
*Preston Tobe Garrett __ Fountain Inn
John Pratt Gore _____ Asheville, N. C.
Fletcher Ford Gray _____ Greenville
Walter Lee Hicks, Jr.__Forest City, N. C.
Sam Cozby Hunt _____ Greenville
Robert James Lindsay, Jr. ____ Chester
Louis Wilton Manning _____ Latta
Ellis Bethea Mellette _____ Sharon
*George McCord Miller ____ Greenwood
James Edward Robinson ____ Florence
William Ramage Wise _____ Newberry
Lewis Jefferson Woodward, Jr. Anderson

Bachelor of Mechanical Engineering Degree

*Marion Wilson Ackerman, Jr. _____ Cottageville
Robert Earle Agnew _____ Donalds
*Douglas Wilson Bradbury ____ Seneca
Daniel Phillip Darwin _____ Gaffney
John Joseph Harper _____ Seneca
Charles Smith Lane __ Leaksville, N. C.
Herbert David Leigh, Jr. Savannah, Ga.
Harry McKeown _____ Spartanburg
*Frank Coxe Mills, Jr. __ Acworth, Ga.
Paul Howard Nelson __Maplewood, N. J.
Carl Gustav Planck, Jr. __ Charleston
William Jackson Ragsdale ___ Easley
Thomas Richardson __ Maplewood, N. J.
Jacob Rhodes Rogers _____ Latta
Robert William Scarborough __ Buffalo
Carl Thompson Warner ____ Greenwood
Milton Dean Willis _____ Spartanburg
John Andrew Winfield__Stony Creek, Va.
Ernest LeRoy Young, Jr. ____ Fairfax

School of General Science

Bachelor of Science Degree

General Science

Harry Louis Acker _____ Anderson
Henry Thurston Bagnal _____ Sumter
Milton Morgan Berry ____ Atlanta, Ga.
William Innes Bouton ____ Ware Shoals
Raymond Cochran _____ Charleston
Francis Marion Craven _____ Florence

* With honor.

Thomas Fuller Davis, III ..Orlando, Fla.
James Stewart Ehrhardt .. Charleston
Benjamin Stone Harrison ..... Rocky Mount, N. C.
Harold Curtis Jones, Jr. ..... Saluda
Theodore Ernest Kerhulas..Tryon, N. C.
Alfred Henry Kirchner .... Greenville
John Jenkins LaRoche .... Charleston
John Garnett Lawton ..... York
Marion Russell Lawton ..... Garnett
William Milner McGinty .... Clemson
John Cuttino McKnight ..... Kannapolis, N. C.
Kenneth Findley McLaurin, St. Matthews
Robert Bruce Marshall .. Quincy, Mass.
Harry Buist Mays ..... Fair Play
Paul Ernest Morgan, Jr. .... Gaffney
Morton Rabinowitz ..... Allendale
James Edward Schmidt ..... Roselle Park, N. J.
Edward Lowry Shuler .... Eutawville
Thomas Louis Smith, Jr. .. Charleston
James Manly Stallworth .. St. Matthews
William Overman Van Wyck, Jr. ... Covina, Calif.
William Barnett Wade ..... Clinton
Manly Emerson Wright ..... Fredericksburg, Va.

Pre-Medicine

Harry Boatwright ..... Seneca
James Samuel Garrison .... Anderson
•William Harris Mathis, Jr. ..... Augusta, Ga.

School of Textiles

Bachelor of Science Degree

Textile Chemistry

Walter Cannon Boliver .... Orangeburg
Edward Cohen ..... Newark, N. J.
Alexander DeWitt Graham..Rock Hill
Graham Glenn Guyton ..... Sumter
John Harold Levin ..... Beaufort
Richard Andrew Martinell .. Clemson
Edmund Ravenel Roper .. Spartanburg
Joseph Alvin Shirley ..... Bath
Charles Lowndes Whisnant, Jr. ..... Charlotte, N. C.

Textile Engineering

Clarence Edward Anderson .... Seneca
Clyde Henry Hammett Blair Clemson
Thomas William Brice, Jr. ..Woodward
Paul Julius Burns ..... Greenville
Charles Davis Cobb ..... Belton
Thomas Woodward Ellison .. Winnsboro
Levi Quincy Fellers ..... Newberry
Robert Clinton Fellers .... Prosperity
Thomas Dale Ferguson, Jr. ..Abbeville
Richard Clay Forester, Jr. .... Sumter
William Wallace Foster, Jr. ..Greenville
Ralph Baker Fulmer ..... Leesville
George Williams Gage, Jr. .. Anderson
William Anderson Greene .. Orangeburg
Isaac Hobart Grimball, Jr. Johns Island
•John H. Gaines Hammond Greenwood
Clifford Barron Hayes, Jr. .. Lyman
•John Madison Heape .... Charleston
Robert Odell Holcombe .. Fountain Inn
Ellis Murphy Ivey, Jr. .. LaGrange, Ga.
Grady Harrison James .... Greenwood
George Carol Jolly ..... Anderson
Robert Alvin King ..... Abbeville
Herbert Blair Knox ..... Antreville
Ottaway Kenton McCartney, Jr. ..... Alta Vista, Va.
William Vernon McCrary .... Anderson
George McKamie McMillan ..... Clarksville, Ga.
Donald Ross May, Jr. .. Asheville, N. C.
William Shepard Nicholson, Jr .. Union
James Lawrence Orr ..... Anderson
James Wesley Parrish ..... Clover
William Walker Posey .. Spartanburg
William Andrew Rhyne Gastonia, N. C.
Benjamin Thompson Rushing .. Estill
Clarence Kimbrough Sells .. Charleston
Robert George Sharpe ..... Abbeville
Oren Eugene Sullivan ..... Gaffney
George Huiet Waters, Jr. .... Johnston
Thomas Peden West ..... Greenville
Charles Victor Wray ..... Clemson
Carlisle McClain Zeigler .. St. Matthews

Weaving and Designing

William Henry Little ..... Belton
Clarence Earle Spires ..... Hartsville

School of Vocational Education

Bachelor of Science Degree

Vocational Agricultural Education

Paul Curtis Ballenger .... Westminster
Walter Malcolm Bell, Jr. .... Hartsville
Carl Victor Black ..... Ward
Harold Brewer ..... Lane
Martin Luther Bridges .... Blacksburg
Lloyd Hamilton Bull ..... Cameron
•James Roy Carter, Jr. .... Fort Lawn
Odus Kinard Cook ..... Prosperity

• With honor.

Raymond Lee Cooley ..... Chesnee
*Joe Berry Earle ..... Central
Sylvian Wilson Epting ..... Newberry
Oswald Kennerly Furtick .. Springfield
Claud James Goodman Paw Creek, N. C.
Roy McQueen Gramling, Jr. Orangeburg
Lawrence Whitfield Hall ..... Iva
George William Hance .. Heath Springs
Loyd George Hanna ..... Hemingway
Henry Leonidas Harris ..... Conway
Jacob Ritter Harter ..... Fairfax
Lewis Samuel Horton, Jr. .. Pageland
Robert Calvin Hubbard, Jr. ..... Seneca
James Paul Huckaby ..... Enoree
James Dean Hughey ..... Greer
Wister Orr Jackson, Jr. ..... Starr
Jerome Wilson Johnson ..... Easley
Woodrow Wilson Jordan .. Timmonsville
Lewis Ezell Lanford ..... Woodruff
James Banks McFadden .. Great Falls
Sheppard Alan McKenzie, Jr .. Mullins
*Franklin Edward McPhail ..... Iva
Herbert Dewey Marett ..... Fair Play
William Luther Mills ..... Campobello
Francis Brunmette Mobley, Jr., Lodge
Clancy Orrie Myers, Jr. ..... Bowman
Charles Gordon Newton, Jr. .....
Myrtle Beach
Stanley Harold Pruitt ..... Anderson
John Wilson Richardson ..... Marion
Hezekia Jacob Ross, Jr. .. Summerton
Arthur Thomas Simpson ..... Blaney
*George Asbury Stoudemire .....
Little Mountain
Samuel Petigrue Stribling..Westminster
James Edward Switzer ..... Roebuck
Charlie Wilson Thompson .. Reevesville
Roy Todd ..... Loris
James William Truluck ..... Olanta
Howard Monroe Vassey ..... Chesnee
Frederick Eugene Wells, Jr..Greenwood
Eddie Clarence West ..... Conway
Smiley Broadus Williams ..... Greer

Education

Charles Rufus Clegg ..... Clemson
Thaddeus Roland Moorer, Jr. .....
Johns Island

Industrial Education

Porter Huguenin Adams ..... Gadsden
John Leonard Almeida ..... Charleston
Thomas Patterson Baskin, Jr., Anderson
Thomas Moffatt Burriss ..... Anderson
William Franklin Campbell .. Anderson
Walter Dean Collins ..... Inman
Howard Stone Denny ..... Bishopville
Landrum Noah Evans ..... Six Mile
Maurice Dowling Hiers .. Waycross, Ga.
Bruce Dunlap Hunt ..... Westminster
John Baxter Lee, Jr. ..... Alcolu
Holland Cromer Oswald, Jr., Lexington
James Nathanial Pearman, Jr. .....
Honea Path

Textile Industrial Education

Andrew Harold Baker .. Gastonia, N. C.
Floyd Max Hunt ..... Liberty

DEGREES CONFERRED SEPTEMBER 10, 1940

School of Agriculture

Bachelor of Science Degree

Agriculture—Agronomy Major

Frank Martin Fleming ..... Lanford

Agriculture—Dairy Major

Henry Hardison Hanna ..... Blacksburg

Agricultural Engineering

James Davison Heriot ..... Dalzell
Carlisle Hardin Triplett ..... Chester

School of Engineering

Bachelor of Science Degree

Architecture

Miles Edward Falls ..... Asheville, N. C.
Thomas Edward Goodson .. Hartsville
William Luther Horne ..... Greenwood
James Ashley Thigpen, Jr. .. Florence

*With honor.

Chemical Engineering

Francis Bizzel Elmore, Jr., Savannah, Ga. Walter Leon Shealy ..... Batesburg

Bachelor of Civil Engineering Degree

Wesley Oliver Chandler..Hickory, N. C. John Rhett Frazier ..... Blairs

Bachelor of Mechanical Engineering Degree

John Randolph Bettis ..... Greenville
John Guyton Farmer ..... Anderson
Charles Oliver Farnum, Jr., Orangeburg
Harvey Preston Hall ..... Clemson
Jerry Lewis Houck ..... Cordova
Cole Benjamin Sutton, Jr.....Columbia

School of General Science

Bachelor of Science Degree

General Science

Gary Johnson Anderson, Jr., Williston
Edward Kenneth Burdette, Jr. ..... Charleston
Nicholas DeMai, Jr., Rocky Mount, N. C.
Joseph Cleon Hunter ..... Liberty
Robert Augustine Pericola, Jr. .. .. Charleston
Clay Bruce Summers ..... Columbia

School of Textiles

Bachelor of Science Degree

Textile Engineering

Elliott Padgett Cleveland .... Marietta
Julius R. Eadon, Jr. ..... Manning
Joseph Ernest Payne ..... Piedmont

School of Vocational Education

Bachelor of Science Degree

Vocational Agricultural Education

James Boyce Alexander ..... Central
Robert William Ballentine .. Prosperity
Lawrence Edward Creel, Jr. .. Poston
Peter Howard Dantzler ..... Santee
Lynnwood Murat Johnson, Jr., Edgefield
Junius McLaurin Lowder, Jr., Turbeville
Victor Willard Vansant .... Batesburg

Education

Donovan Jordan Willis .. Travelers Rest

Industrial Education

Herbert Drannon Moon .. Westminster
Paul Newton ..... Central
James Theodore ..... Greenville

GRADUATES OF 1940 BY MAJOR COURSES

School of Agriculture	47
Agricultural Economics	2
Agricultural Engineering	9
Agronomy	15
Animal Husbandry	8
Dairy	6
Entomology	2
Horticulture	5
School of Chemistry	11
Chemistry	11
School of Engineering	88
Architecture	9
Chemical Engineering	14
Civil Engineering	23
Electrical Engineering	17
Mechanical Engineering	25
School of General Science	41
General Science	37
Pre-Medicine	4
School of Textiles	58
Textile Chemistry	9
Textile Engineering	46
Weaving and Designing	3
School of Vocational Education	83
Vocational Agricultural Education	60
Education	4
Industrial Education	17
Textile Industrial Education	2
Total Graduates of 1940	328

TOTAL GRADUATES BY MAJOR COURSES

Major Course	*Total*
Agriculture	240
Agriculture and Animal Industry	80
Agriculture and Chemistry	69
Agricultural Chemistry	99
Agricultural Economics	70
Agricultural Education	197
Agricultural Engineering	59
Agronomy	378
Animal Husbandry	193
Architecture	158
Arts and Science	137
Bachelor of Science	2
Botany	11
Chemistry	164
Civil Engineering	510
Chemical Engineering	39
Chemistry and Geology	11
Dairy	159
Education	9
Electrical Engineering	517
Engineering Industrial Education	70
Entomology	97
Forestry	8
General Science	218
Horticulture	240
Industrial Education	59
Mechanical Engineering	257
Mechanical and Electrical Engineering	489
Pre-Medicine	6
Soils	9
Textile Chemistry	105
Textile Engineering	487
Textile Industrial Education	79
Vocational Agricultural Education	212
Veterinary Science	16
Weaving and Designing	33

Double Majors

Agricultural Chemistry and Arts and Science	1
Agricultural Chemistry and General Science	1
Agricultural Economics and Animal Husbandry	1
Animal Husbandry and Vocational Agricultural Education	1
Animal Husbandry and Agricultural Education	3
Animal Husbandry and Dairy	2
Arts and Science and Agricultural Economics	1
Chemistry and General Science	1
Civil Engineering and Chemistry and Geology	2
Chemistry and Agricultural Chemistry	1
Electrical Engineering and Mechanical Engineering	9
Horticulture and Agronomy	1
Textile Engineering and Mechanical and Electrical Engineering	1
Total Graduates	5512

LIST OF STUDENTS, FIRST SEMESTER, 1940-1941

The names are arranged in alphabetical order and following the names are symbols indicating classes and courses. The numerals preceding the course symbols refer to classes, viz.: 1, Freshman; 2, Sophomore; 3, Junior; 4, Senior. (Classified as of first semester. See page 58.) A-Agriculture (abbreviation indicates major course for juniors and seniors); Agr-Agronomy; AH-Animal Husbandry; D-Dairy; Ag Ec-Agricultural Economics; Ag Engr-Agricultural Engineering; Ent-Entomology; Hort-Horticulture; GS-General Science; Pre-Med-Pre-Medical; Ar-Architecture; C-Chemistry; E-Engineering (all engineering freshman); CE-Civil Engineering; Ch-Engr-Chemistry Engineering; EE-Electrical Engineering; ME-Mechanical Engineering; T-Textile; TC-Textile Chemistry; WD-Weaving and Designing; V Ag Ed-Vocational Agricultural Education; Ed-Education; I Ed-Industrial Education; TIE-Textile Industrial Education; S-Special (not classified). New students admitted in September, 1940, are indicated by a dagger (†).

Name and Course	Address
Abba, R. E. (1 A)†	Schenectady, N. Y.
Abbott, W. W. (3 TC)	Seneca
Abbee, R. B. (3 Ar)	Hickory, N. C.
Abercrombie, M. W. (1 E)†	Fountain Inn
Able, S. K. (3 V Ag Ed)	Saluda
Abrams, J. P. (3 Pre-Med)	Whitmire
Abrams, M. E. (2 V Ag Ed)	Whitmire
Abrams, T. M. (2 Ag Engr)	Newberry
Ackerman, W. M. (3 TC)	St. George
Ackis, H. S. (4 WD)	Jacksonville, Fla.
Adams, A. T. (1 T)†	Rock Hill
Adams, G. W. (4 GS)	Batesburg
Adams, J. C. (2 I Ed)	Greenwood
Adams, L. C. (2 EE)	Saluda
Adams, R. B. (3EE)	Macon, Ga.
Adams, R. E. (2 CE)†	Atlanta, Ga.
Adams, R. J. (1 Ch-Engr)†	Miami Beach, Fla.
Adams, W. R. (1 Ed)†	Greenville
Adickes, G. C. (3 Pre-Med)	York
Agnew, J. C. P. (4 Ag Engr)	Starr
Aiken, D. E. (3 Agr)	New Zion
Albergotti, W. G. (1 E)†	Columbia
Albergotti, W. M. (3 EE)	Columbia
Alexander, A. C. (1 A)†	Cleveland, Ohio
Alexander, A. J. (2 I Ed)	Greenville
Alexander, D. L. (1 E)†	Aiken
Alexander, J. S. (1 V Ag Ed)†	Seneca
Alexander, Otho (1 V Ag Ed)†	Calhoun
Alexander, W. M. (2 Pre-Med)	Seneca
Alexander, W. R. (1 T)†	Greenville
Alford, H. I. (1 Ed)†	Hartwell, Ga.
Allen, D. F. (2 TC)	Langley
Allen, E. W. (1A)†	Clio
Allen, J. E. (1 T)	Gainesville, Ga.
Allen, J. H. (4 ME)	Spartanburg
Allen, L. H. (1 T)†	Gainesville, Ga.
Allen, R. L. (1 TC)†	Rock Hill
Allison, E. (4 T)	Forest City, N. C.
Allison, R. L. (1 V Ag Ed)†	Pauline
Allison, W. A. (3 ME)	Chesnee
Alman, M. H. (3 D)	Jonesville
Alston, R. P. (3 Agr)	Rembert
Altman, D. D. (2 Agr)	Clio
Anderson, B. W. (4 Ag Ec)	Edgefield
Anderson, C. S. (3 Ag Engr)	Sumter
Anderson, H. N. (3 C)	Ft. Moultrie
Anderson, R. Matthew (1 E)†	Greenwich, Conn.
Anderson, R. Moffatt (3 ME)	Chester
Anderson, W. F. (1 E)†	Ninety Six
Andrea, J. A. (1 E)†	Greer
Anthony, S. H. (3 Pre-Med)	Greenville
Antonakos, James (1 E)†	Anderson
Appleby, C. L. (2 V Ag Ed)	St. George
Arant, L. L. (2 T)	Ft. Motte
Arant, T. D. (4 GS)	Ft. Motte
Ard, Luther (2 A)	Greelyville
Arledge, F. D. (2 V Ag Ed)†	Saluda, N. C.
Armour, T. S. (1 E)†	Eastover
Armstrong, E. S. (1 T)†	Greenville
Armstrong, R. B. (1 A)†	Columbia
Arnette, J. W. E. (2 A)	Winnsboro
Arnold, C. J. (1 GS)†	Elberton, Ga.
Ashley, W. M. (1 T)†	Anderson
Ashford, J. F. (3 GS)	Georgetown
Askey, C. M. (3 E)†	North Augusta
Askey, M. M. (1 GS)†	North Augusta
Askins, J. D. (1 Pre-Med)	Hartsville
Askins, P. R. (2 ME)	Hartsville
Atkinson, C. R. (1 A)†	Mt. Croghan
Atkinson, J. A. (3 V Ag Ed)†	Central
Atkinson, M. F. (1 V Ag Ed)†	York
Aughtry, P. C. (1 E)†	Charlotte, N. C.
Aull, E. C. (1 T)†	Leesville
Aull, G. H. (1 E)†	Clemson
Austell, J. C. (1 T)†	Blacksburg
Austell, J. R. (3 I Ed)	Shelby, N. C.
Austin, M. G. (1 V Ag Ed)†	Cameron
Awtrey, W. E. (4 GS)	West Columbia
Ayers, R. R. (2 C)	Orangeburg
Babb, E. M. (1 T)†	Gray Court
Babb, J. M. (4 Ag Engr)	Gray Court
Baber, C. B. (1 E)†	Gaffney
Badia, J. P. (2 Ar)	Santurce, P. R.
Bagwell, R. F. (2 T)	Glendale
Bailey, E. L. (1 GS)†	Edisto Island
Bailey, H. L. (3 V Ag Ed)	Wellford
Bailey, R. B. (2 T)	Union
Bailey, W. M. (2 I Ed)	Summerville
Baker, R. F. (2 A)†	Hemingway
Baker, W. H. W. (3 T)	Chester
Baldwin, F. E. (1 A)†	Bennett's Point
Baldwin, T. E. (1 ME)	Clinton
Balfour, F. H. (4 Hort)	Orlando, Fla.
Balentine, C. E. (1 GS)†	Greenville
Ballard, E. J. (3 EE)	Leslie
Ballard, H. G. (3 ME)	Greenville
Ballas, J. A. (1 A)	Washington, D. C.
Ballenger, W. H. (1 E)†	Walhalla
Ballentine, G. W. (3 D)	Easley
Bamberg, G. H. (1 E)†	Charleston
Barber, G. H. (1 A)†	Fairfax
Barber, G. L. (2 Pre-Med)	Fairfax
Bardin, P. T. (2 Ag)	Cameron
Barker, J. L. (1 T)†	Winnsboro

Name and Course	Address
Barmore, W. E. (2 AH)	Donalds
Barnard, H. R. (1 E)†	Orlando, Fla.
Barnes, F. S. (3 EE)	Rock Hill
Barnes, L. A. (1 E)†	Rock Hill
Barnett, A. N. (1 A)†	Asheville, N. C.
Barnett, J. B. (1 E)†	Campobello
Barnett, J. C. (1 A)†	York
Barnett, J. H. (1 A)†	Westminster
Barnett, P. G. (1 TC)†	Aiken
Barnette, W. A. (3 TC)	Greenwood
Barnwell, B. S. (3 T)	Abbeville
Barnwell, G. H. (1 C)†	Florence
Barrineau, E. R. (2 Ag)	Lake City
Barron, J. I. (4 ME)	York
Barrow, R. C. (1 E)†	Greenville
Barton, J. H. (3 T)	Anderson
Barton, J. S. (2 CE)	Lancaster
Barton, L. M. (4 EE)	Taylors
Baskin, R. R. (2 A)	Bishopville
Batchelor, P. R. (4 Agr)	Blacksburg
Bates, W. E. (2 T)	Tuxedo, N. C.
Bates, W. J. (1 I Ed)†	Moncks Corner
Bauknight, W. E. (2 GS)	Florence
Baxley, H. H. (1 E)†	Kershaw
Baxley, J. Baynard (2 ME)	Lodge
Baxley, J. Bunyan (2 Ag Ec)	Barnwell
Baxter, C. L. (1 A)†	Garnett
Beacham, M. D. (3 EE)	Newberry
Beattie, S. M. (4 T)	Greenville
Beaudrot, C. R. (4 ME)	Greenwood
Beaudrot, J. L. (4 ME)	Greenwood
Beaumont, G. A. (1 E)†	Florence
Becerra, V. O. (1 A)†	Santurce, P. R.
Beckett, J. T. (3 EE)	Johns Island
Bedenbaugh, H. T. (2 Ag Engr)	Prosperity
Beeks, N. S. (2 T)	Ware Shoals
Beeson, M. G. (2 CE)	Mullins
Belk, D. P. (2 Ed)	Gastonia, N. C.
Bell, Fred (2 A)	Tifton, Ga.
Bell, J. J. (3 EE)	Barnwell
Bell, K. R. (1 A)†	Lydia
Bell, M. S. (2 TC)	Greenwood
Bellamy, G. G. (4 V Ag Ed)	Loris
Bellon, A. F. (1 E)†	Arverne, N. Y.
Belser, T. H. (1 Pre-Med)†	Summerton
Belue, H. P. (4 C)	Charlotte, N. C.
Belue, J. F. (1 GS)†	Charlotte, N. C.
Belue, R. O. (1 E)†	Union
Benfield, J. K. (4 TC)	York
Benjamin, G. F. (4 ME)	Augusta, Ga.
Benjamin, Irving (2 Pre-Med)	Bowman
Bennett, E. F. (4 V Ag Ed)	Vance
Bennett, G. G. (3 GS)†	Georgetown, Ga.
Bennett, J. C. (1 E)†	St. Matthews
Bennett, L. E. (1 V Ag Ed)	Springfield
Bennett, T. P. (2 ME)	Milford, Delaware
Bennett, Walter, (4 V Ag Ed)	Orangeburg
Benton, D. A. (4 Agr)	Timmonsville
Berry, E. M. (1 Ag Engr)†	Smoaks
Berry, H. G. (4 T)	Greenville
Berry, H. S. (4 Hort)	Greer
Berry, M. K. (3 EE)	Atlanta, Ga.
Berry, M. O. (2 Ag Engr)	Smoaks
Berry, R. Julius (2 A)	Bowman
Berry, R. Justin (4 Ag Engr)	Smoaks
Berry, R. P. (2 ME)	Greenville
Berry, R. S. (3 T)	York
Bessent, C. F. (3 ME)	Sparrows Point, Md.
Bessent, T. A. (3 ME)	Sparrows Point, Md.
Bethea, C. J. (4 Ag Engr)	McColl
Bethea, J. O. (1 E)†	Darlington
Bethea, T. C. (4 Ag Engr)	Dillon
Bethea, W. E. (3 GS)	Latta
Betsill, W. L. (3 Agr)	Laurens
Betters, R. J. (2 EE)	Pittsfield, Mass.

Name and Course	Address
Bickley, C. E. (4 TE)	Pendleton
Bickley, D. W. (3 Agr)	Lexington
Biemann, H. D. (1 E)†	Walhalla
Bigger, W. R. (1 T)†	York
Bird, C. L. (2 T)	Asheville, N. C.
Bird, E. R. (4 T)	Asheville, N. C.
Bird, J. P. (3 Ar)	Greenville
Bird, L. S. (2 V Ag Ed)	Greenville
Bischoff, R. J. (4 C)	Summerville
Bishop, G. B. (1 GS)†	Moncks Corner
Bisset, D. A. (3 Ch-Engr)	Savannah, Ga.
Black, C. L. (1 T)†	Greenville
Black, T. A. (1 E)†	Ruffin
Black, T. H. (4 Ar)	Columbia
Blackmon, C. R. (3 GS)	Timmonsville
Blackmon, E. B. (2 Ar)	Heath Springs
Blackmon, W. E. (1 T)†	Lancaster
Blackwell, B. E. (3 V Ag Ed)	Landrum
Blair, H. C. (4 Ar)	Sevierville, Tenn.
Blair, R. C. (2 ME)	Blairs
Blake, C. H. (1 T)†	Greenwood
Blakeney, D. H. (2 T)	Lancaster
Blakeney, W. E. (1 A)†	Lancaster
Blalock, J. D. (2 T)	Enka, N. C.
Blanchett, D. O. (1 Ch-Engr)†	Greenville
Blanchett, M. P. (2 T)	Abbeville
Blanco, L. J. (1 E)†	San Juan P. R.
Blanton, H. E. (2 ME)	Spartanburg
Blessing, J. E. (4 D)	Kingsport, Tenn.
Boatwright, E. O. (1 Pre-Med)†	Georgetown
Bobo, E. P. (1 V Ag Ed)†	Gray Court
Bobo, J. E. (2 ME)	Cross Anchor
Bobo, R. S. (1 T)†	Greenville
Bobo, T. P. (2 GS)	Greenville
Bobrow, A. E. (1 A)†	Brooklyn, N. Y.
Bodie, J. W. (2 EE)	Newberry
Bodie, K. J. (3 V Ag Ed)	Ward
Boggs, A. J. (3 C)	Pickens
Boggs, R. V. (1 V Ag Ed)†	Seneca
Boissoneault, L. H. (2 ME)	Charleston
Boland, T. S. (4 T)	Blackville
Bolin, Paul (3 Pre-Med)†	Orangeburg
Bolt, J. C. (1 Ag Engr)†	Gray Court
Bolt, J. E. (3 T)	Charlotte, N. C.
Bolt, W. H. (4 ME)	Seneca
Bond, L. P. (2 ME)	Columbia
Bonds, R. S. (1 E)†	Georgetown
Bone, H. G. (2 I Ed)	Lowndesville
Bonnette, G. H. (3 Ag Ec)	Florence
Boozer, H. W. (2 AH)	Leesville
Bossett, R. H. (1 Ed)†	Spring Lake, N. J.
Bostick, J. L. (1 A)†	Pamplico
Boswell, R. C. (4 T)	Travelers Rest
Botts, J. A. (3 Ch-Engr)	Abbeville
Botts, R. H. (1 E)†	Abbeville
Boulware, J. E. (3 Agr)	Newberry
Bowen, T. L. (1 E)†	Easley
Bowman, P. K. (1 C)†	Dalzell
Boy. C. T. (3 T)	Fort Mill
Boyce, C. D. (1 C)†	Pelzer
Boyce, H. K. (2 GS)	Cross Hill
Boyce, J. A. (1 T)†	Iva
Boyd, L. V. (1 V Ag Ed)†	Fort Mill
Boyd, W. B. (2 Ch-Engr)	Greenville
Boyle, W. A. (1 E)†	Summerville
Boylston, L. L. (1 Pre-Med)†	Aiken
Boylston, W. L. (4 Ag Engr)	Charleston
Bracey, J. V. (2 GS)†	Augusta, Ga.
Bracken, J. J. (S)	Liberty
Brackett, M. M. (3 Ar)	Hendersonville, N. C.
Bradford, Henry (4 T)	Berryton, Ga.
Bradham, L. L. (1 GS)†	Sumter
Bradley, G. H. (1 E)†	New Smyrna Beach, Fla.
Bradshaw, O. C. (2 EE)	Greenville
Brannon, T. L. (3 V Ag Ed)	Cassatt

Name and Course	Address
Brantley, R. C. (1 E)†	Clinchfield, Ga.
Branyon, A. R. (1 A)†	Honea Path
Branyon, H. E. (1 E)†	Honea Path
Branyon, W. E. (1 A)	Honea Path
Braswell, H. A. (1 E)	Marion
Brazell, D. E. (4 V Ag Ed)	Blaney
Brazell, L. G. (1 E)†	Rock Hill
Breazeale, K. S. (3 AH)	Pendleton
Breazeale, T. C. (3 D)	Belton
Breeden, C. L. (1 E)†	Bennettsville
Breeden, G. B. (3 ME)†	Mt. Pleasant
Breeland, R. L. (2 ME)	Columbia
Breland, W. D. D. (4 Ag Ec)	Ruffin
Brennen, J. J. (2 TC)	Auburn, N. Y.
Bridges, J. M. (1 A)†	Heath Springs
Bridges, W. H. (1 E)†	Heath Springs
Briggs, R. E. (2 A)	Manning
Bright, O. E. (1 GS)†	Savannah, Ga.
Brinson, Buck (3 Ag Engr)†	Greenville
Briscoe, R. E. (1 EE)	Moncks Corner
Bristol, W. G. (2 CE)	New Port Richey, Fla.
Britton, W. R. (1 E)†	Sumter
Brockman, W. D. (4 GS)	Greer
Brooks, A. L. (4 GS)	Timmonsville
Brooks, Edward (2 ME)	Penns Grove, N. J.
Brooks, J. R. (2 T)	Piedmont
Brooks, Q. P. (2 I Ed)	North Charleston
Brooks, W. C. (2 T)	Prosperity
Broun, Donald (3 ME)	Wilmington, N. C.
Brown, B. V. (3 Ag Engr)	Pacolet
Brown, C. H. (2 V Ag Ed)	Travelers Rest
Brown, C. S. (1 Pre-Med)†	Greenville
Brown, D. H. (2 Pre-Med)	Camden
Brown, E. B. (3 ME)	Philadelphia, Pa.
Brown, G. W. (2 V Ag Ed)	Hickory Grove
Brown, H. E. (2 T)	Greenville
Brown, H. G. (2 Ch-Engr)	Orangeburg
Brown, J. A. (1 Ch-Engr)†	Greenville
Brown, J. E. (2 A)	Swansea
Brown, J. G. (2 I Ed)	Westminster
Brown, J. L. (3 Agr & Hort)	Conway
Brown, J. W. (1 E)†	Greenville
Brown, L. E. (1 E)†	Anderson
Brown, M. K. (2 V Ag Ed)	Troutmans, N. C.
Brown, M. W. (2 EE)	Pacolet
Brown, R. A. (1 E)†	Cliffside, N. C.
Brown, R. C. (1 E)†	Clemson
Brown, R. H. (4 GS)	Charleston
Browne, C. H. (3 C)	Florence
Broyles, J. N. (4 AH)	Townville
Bruggemann, G. H. W. (2 T)	Charleston
Brunson, W. L. (3 V Ag Ed)	Brunson
Bruorton, J. P. (1 V Ag Ed)†	Hemingway
Bryan, D. C. (3 Agr)	Swansea
Bryan, J. F. (3 EE)	Fairfax
Bryant, Loyell (3 V Ag Ed)	Carthage, Tenn.
Bubser, E. D. (2 A)	Bethlehem, Pa.
Buchanan, H. L. (4 T)	Anderson
Buchanan, R. L. (2 EE)	Greenwood
Buddin, A. L. (1 E)†	Rock Hill
Buff, J. N. (2 GS)	Elko, Ga.
Buford, W. B. (3 GS)	Clinton
Buhrmaster, D. H. (2 A)	Schenectady, N. Y.
Buie, P. D. (1 Ag Engr.)†	Denmark
Buist, Billie (3 ME)	Blackville
Bull, B. R. (4 V Ag Ed)	Cameron
Bull, R. L. (3 V Ag Ed)	Santee
Bundrick, J. S. (1 E)†	Camden
Burch. R. M. (3 Agr)	Florence
Burgess, A. F. (4 Ag Engr)	Belton
Burgess, E. C. (4 GS)	Kingstree
Burgess, G. H. (3 ME)	Chester
Burgess, J. A. (1 E)†	Summerton
Burgess, W. H. (2 GS)	Sumter
Burley, B. B. (3 Pre-Med)	Clemson
Burley, W. D. (2 GS)	Clemson
Burnett, A. D. (2 Pre-Med)	Sumter
Burnette, H. W. (3 GS)	Belton
Burns, R. E. (1 A)†	Laurens
Burrell, C. M. (1 V Ag Ed)†	Salem
Burress, L. M. (1 E)†	Pendleton
Burrows, J. R. (2 A)	Oswego
Burry, S. R. (1 A)†	Travelers Rest
Burton, S. M. (1 E)†	Belton
Bush, S. M. (4 T)	Colquitt, Ga.
Butler, C. E. (1 A)†	Travelers Rest
Butler, E. C. (4 Ag Ec)	Yonges Island
Butler, G. W. (3 V Ag Ed)	Travelers Rest
Butler, M. C. (1 Ed)†	Greenville
Butts, S. W. (S)	Newry
Byars, H. H. (1 I Ed)	Liberty
Byars, R. W. (1 A)	Pacolet Mills
Byrd, D. C. (1 E)†	Clinton
Byrd, R. H. (2 GS)	Pleasant Ridge, Mich.
Byrd, W. B. (1 E)†	Kershaw
Byrd, W. C. (3 CE)	Clinton
Caddelle, C. E. (2 CE)	Hartsville
Cagle, J. D. (2 V Ag Ed)	Andrews
Cagle, W. L. (1 E)†	Roanoke Rapids, N. C.
Cain, C. W. (2 A)	Florence
Cain, J. N. (3 V Ag Ed)	Sumter
Caldwell, T. H. (4 V Ag Ed)	Ruffin
Calhoun, J. R. C. (1 Ch-Engr)†	Dillon
Calhoun, R. A. (4 CE)	Ringgold, Ga.
Califf, J. W. (1 Ar)†	Holly Hill
Camak, T. M. (1 E)†	Ware Shoals
Cameron, A. N. (4 CE)	Rocky Mount, N. C.
Camp, W. B. (1 A)†	Bakersfield, Calif.
Campbell, Colin (1 A)†	Sheldon
Campbell, C. M. (3 Ag Engr)	Sheldon
Campbell, D. B. (1 EE)	Dillon
Campbell, L. T. (2 A)	Anderson
Campbell, R. N. (2 EE)	Greenville
Canfield, J. F. (1 A)†	Hodges
Cannon, C. D. (4 Ag Engr)	Hemingway
Cannon, J. E. (4 TC)	Hartsville
Cannon, J. H. (1 A)†	Greenville
Cannon, O. B. (3 GS)	Newberry
Cannon, R. N. (3 V Ag Ed)	Hemingway
Cantrell, C. W. (2 EE)	Spartanburg
Cantrell, M. C. (4 V Ag Ed)	Cowpens
Cappelmann, E. H. (3 ME)†	Columbia
Carder, W. H. (4 TC)	Bedford, Pa.
Cargill, T. C. (3 T)	Columbia
Carlon, S. R. (1 E)†	Pittsfield, Mass.
Carmicheal, A. C. (4 D)	Aynor
Carmicheal, G. A. (2 A)	Claussen
Carnes, J. E. (3 GS)	Lancaster
Carpenter, C. T. (2 TC)	Kings Mountain, N. C.
Carpenter, D. O. (1 T)†	Newberry
Carpenter, J. H. (1 E)†	Rutherfordton, N. C.
Carpenter, R. B. (1 E)†	Thomasville, N. C.
Carson, J. E. (1 C)†	Central
Carson, W. H. (3 T)	Orangeburg
Cartee, J. K. (3 V Ag Ed)	Liberty
Carter, C. A. (2 Ar)	Charleston
Carter, C. C. (1 V Ag Ed)	Leo
Carter, C. F. (2 Ar)	Washington, D. C.
Carter, D. S. (1 GS)	Ridgeland
Carter, J. D. (4 V Ag Ed)	Leo
Carter, L. D. (1 A)†	Ehrhardt
Carter, M. E. (1 V Ag Ed)	Elliott
Carter, T. F. (1 Ed)	Anderson
Carter, W. W. (1 Pre-Med)	Barnwell
Cary, L. H. (2 EE)	Greenville
Cary, T. C. (2 Pre-Med)	Spartanburg
Casale, R. S. (4 C)	Brooklyn, N. Y.
Cash, F. G. (3 T & WD)	Tucapau
Cason, L. L. (4 C)	Williamston
Casserly, J. J. (3 TC)	Flushing, N. Y.

Name and Course	Address
Castles, J. F. (3 EE)	Winnsboro
Caston, B. A. (2 V Ag Ed)	Pageland
Cathcart, J. V. (1 C)†	Bishopville
Cathcart, R. S. (1 E)†	Hartsville
Cathey, R. T. (1 E)†	Canton, N. C.
Cato, L. F. (1 V Ag Ed)†	Monetta
Caughman, K. D. (1 E)†	Columbia
Caughman, R. B. (4 ME)	Columbia
Causey, J. F. (1 E)†	Furman
Cely, W. H. (2 Ar)	Easley
Chadwick, J. W. (1 E)†	Saluda
Chalmers, J. F. (1 T)†	Ware Shoals
Chandler, A. W. (3 Ch-Engr)	Marietta, Ga.
Chandler, R. E. (1 T)†	Darlington
Chandler, W. J. (1 V Ag Ed)	Henry
Chapin, J. F. (2 Pre-Med)	Ridgewood, N. J.
Chaplin, P. C. (1 E)†	Hartsville
Chapman, J. E. (1 E)†	Cross Hill
Chapman, Q. L (2 A)	Mountville
Chapman, W. F. (2 A)	Hartsville
Charles, Jack (3 WD)	Piedmont
Chastain, V. T. (2 V Ag Ed)	Pickens
Chastain, W. H. (3 V Ag Ed)	Taylors
Cheatham, F. C. (4 T)	Greenwood
Cheatham, R. L. (3 TC)	Abbeville
Cheek, Hubert, (1 A)†	Bowersville, Ga.
Cheezem, C. K. (1 E)†	Greer
Cheezem, W. L. (3 Pre-Med)	Greer
Cheshire, A. W. (1 E)†	Belton
Chestochowski, B. A. (2 TC)	New York, N. Y.
Chipley, W. A. (2 GS)	Lynchburg, Va.
Chitty, H. M. (3 AH)	Gainesville, Fla.
Christman, M. S. (2 T)	Spartanburg
Christopher, J. D. (4 TC)	Greenville
Chuharski, J. (4 I Ed)	Port Chester, N. Y.
Clanton, C. P. (2 T)	Lancaster
Clark, J. R. (2 Ag Ec)	Columbia
Clark, P. L. (1 E)†	Anderson
Clark, W. M. (3 ME)	Johnston
Clarke, W. E. (1 A)	Anderson
Clawson, C. H. (3 CE)	Rock Hill
Cleveland, J. H. (4 T)†	Cleveland
Cline, W. E. (4 ME)	Newton, N. C.
Cloaninger, J. M. (2 A)	Lykesland
Clotfelter, J. B. (2 Ar)	Easley
Clowney, J. Y. (3 Ch-Engr)	Columbia
Coachman, F. G. (2 ME)	Manning
Coakley, F. H. (3 Ag Ec)	Washington, D. C.
Coakley, G. E. (4 Ag Ec)	Washington, D. C.
Cobb, T. W. (1 T)†	Cateechee
Coble, G. S. (2 Ch-Engr)	Charlotte, N. C.
Cochran, H. H. (1 E)†	Charleston
Cochran, W. R. (1 E)†	Seneca
Coffey, E. S. (1 E)†	Manning
Cogswell, G. W. (3 T)	Charleston
Cohen, Harry (2 Ed)	Walterboro
Coker, Homer (1 GS)†	Turbeville
Coker, L. W. (3 GS)	Turbeville
Coker, T. H. (4 T)	Columbia
Coleman, B. S. (1 A)†	Fountain Inn
Coleman, C. E. (1 T)†	Charlotte, N. C.
Coleman, D. B. (4 V Ag Ed)	Saluda
Coleman, H. A. (3 ME)	Mt. Pleasant
Coleman, J. R. (3 ME)	Pamplico
Coleman, R. W. (2 Pre-Med)	Pamplico
Collier, J. O. (3 E)†	Eatonton, Ga.
Collings, E. B. (2 A)	Conway
Collins, W. A. (2 V Ag Ed)	Mullins
Coltrane, R. A. (3 ME)	Columbia
Colvin, J. S. (3 ME)	Chester
Colvin, R. E. (3 C)	Darlington
Compton, E. S. (3 I Ed)	Greenwood
Compton, George (4 I Ed)	Hartsville
Cone, Leroy, (2 V Ag Ed)	Fairfax
Cone, T. W. (1 V Ag Ed)†	Brunson

Name and Course	Address
Congleton, M. A. (1 E)†	Maplewood, N. J.
Connell, N. G. (4 V Ag Ed)	Camden
Connor, J. E. (1 E)†	Smoaks
Conyers, J. L. (1 E)†	Cartersville, Ga.
Coogler, F. M. (1 TC)†	Chester
Cook, C. W. (1 GS)†	Gray Court
Cook, V. W. (1 Ch-Engr)†	Atlanta, Ga.
Cooler, E. W. (4 Hort)	Kingstree
Cooler, H. L. (1 Ar)	Kingstree
Cooner, A. W. (3 Ch-Engr)	Batesburg
Cooper, R. L. (2 A)	Simpsonville
Cope, G. B. (3 ME)	Cope
Copeland, C. A. (1 E)†	Gaffney
Copeland, E. J. (1 A)†	Ehrhardt
Copeland, H. J. (4 Hort)	Hilton Village, Va.
Copeland, J. R. (1 E)†	Ehrhardt
Copeland, Neil (4 EE)	Timmonsville
Copley, W. M. (4 EE)	N. Matewan, W. Va.
Corley, E. J. (2 V Ag Ed)	Lexington
Corley, J. E. (2 V Ag Ed)	Lexington
Cornwell, J. B. (2 WD)	Chester
Correll, H. M. (4 Ch-Engr)	York
Cothran, W. B. (2 EE)	Greenwood
Cottingham, J. E. (4 Ag Engr)	Dillon
Cottingham, J. M. (3 Agr)	Dillon
Cotton, H. S. (2 Ag Engr)	Eastover
Couch, J. H. (4 I Ed)	Easley
Couch, K. O. (3 V Ag Ed)	Easley
Courson, J. S. (3 D)	Clarkesville, Ga.
Cowan, M. H. (1 A)†	Columbia
Coward, W. A. (4 Hort)	Aiken
Cox, A. Z. (4 TC)	Hardeeville
Cox, H. C. (4 ME)	Johnsonville
Cox, J. Leighton (2 ME)	Fairforest
Cox, J. Lewis, (3 T)	Belton
Cox, J. R. (S)†	Newry
Cox, L. R. (2 V Ag Ed)	Russellville
Cox, V. M. (1 Ch-Engr)†	Denmark
Cox, W. F. (S)	Clemson
Craddock, H. H. (1 A)†	Fairfax
Craig, J. E. (2 V Ag Ed)	Salem
Craig, R. M. (2 Ed)	Greenville
Cranford, W. D. (2 T)	Sharon
Craven, M. H. (2 Ag-Engr)	Florence
Crawford, E. A. (1 E)†	McConnellsville
Crawford, H. O. (1 A)	Calhoun
Crawford, J. F. (1 E)†	Columbia
Crawford, K. L. (3 GS)	Clemson
Crawford, L. A. (2 T)	Goldville
Crawford, W. A. (1 E)†	Columbia
Crayton, T. W. (4 GS)	Anderson
Crenshaw, W. P. (1 E)†	Charleston
Crews, M. S. (3 TC)	Laurens
Crews, S. F. (3 I Ed)	Hampton
Cribb, T. K. (2 GS)	Spartanburg
Crocker, T. J. (4 Ch-Engr)	Charleston
Croft, J. W. (3 Ch-Engr)†	Aiken
Crook, W. R. (2 A)	Cameron
Crosby, C. D. (2 Ar)	Chester
Crosswell, F. D. (2 ME)	Atlanta, Ga.
Crosswell, J. E. (2 GS)	Atlanta, Ga.
Crouch, D. S. (1 E)†	Clemson
Crouch, H. J. (4 I Ed)	Elko
Crouch, H. L. (3 V Ag Ed)	Saluda
Crouch, J. B. (2 EE)	Saluda
Crow, Smith (2 T)	Spartanburg
Crowder, M. M. (3 V Ag Ed)	Strother
Crowther, F. H. (1 T)†	Clemson
Croxson, T. E. (2 TC)	Charlotte, N. C.
Crumpton, C. H. (1 T)†	Orangeburg
Culbertson, C. B. (1 E)†	Laurens
Culler, J. C. (4 Agr)	Wolfton
Cullum, G. W. (1 Pre-Med)	Johnston
Culp, H. E. (1 V Ag Ed)†	Waxhaw, N. C.
Culpepper, J. P. (2 GS)	Tifton, Ga.

Name and Course	Address
Cunningham, C. D. (3 I Ed)	Liberty Hill
Cunningham, J. W. (1 Ch-Engr)†	Wellford
Cuthbert, F. P. (2 A)	Barnwell
Cuttle, C. R. (2 ME)	Spartanburg
Dabbs, W. A. (1 GS)†	Mayesville
Dailey, J. D. (1 E)†	Clinton
Dalrymple, J. H. C. (2 V Ag Ed)	Mt. Croghan
Dantzler, J. W. (1 A)†	Eutawville
Dantzler, L. A. (3 D)	Eutawville
Darby, H. B. (1 Pre-Med)	Eastover
Darby, W. E. (2 TIE)	Pelzer
Darby, W. M. (3 CE)	Beaufort
Darlington, S. P. (1 E)†	Mt. Pleasant
Darrin, S. W. (3 T)	Spartanburg
Davant, C. (3 Pre-Med)	Columbia
Davant, F. D. (3 Pre-Med)	Columbia
Davenport, B. G. (2 ME)	Columbia
Davenport, J. D. (2 GS)	Greenville
Davenport, R. M. (1 E)†	Greenville
Davenport, S. F. (1 Ar)†	Greenville
Davis, Dean (1 A)†	Seneca
Davis, J. E. (1 E)†	Greer
Davis, J. W. (1 T)†	Columbia
Davis, M. H. (2 Pre-Med)	Norway
Davis, S. E. (4 GS)	Brunswick, Ga.
Davis, T. E. (1 Ar)†	Newberry
Davis, T. L. (4 GS)	Buffalo
Day, R. B. (3 EE)	Atlanta, Ga.
Deale, S. B. (2 C)	Callison
Dean, T. C. (1 GS)†	Anderson
Deaton, J. E. (1 T)†	Kershaw
DeBerry, H. S. (2 Pre-Med)	Florence
Deitz, J. F. (2 Ed)	Hickory, N. C.
DeLany, A. H. (2 GS)	Greenville
Dellastatious, A. E. (4 ME)	Washington, D. C.
Dellastatious, F. A. (3 GS)	Washington, D. C.
Dellinger, W. F. (4 I Ed)	Spartanburg
DeLoach, C. L. (1 A)†	Aiken
DeLoach, F. B. (1 T)†	Columbia
DeLorme, A. C. (2 Pre-Med)	Maplewood, N. J.
Denny, E. R. (3 ME)	Columbia
Denny, H. B. (1 Pre-Med)†	Bishopville
Dent, H. N. (4 Ag Engr)	St. Matthews
Derrick, J. A. (2 Ed)	Johnston
Derrick, J. R. (2 Pre-Med)	Clayton, Ga.
Derrick, W. G. (3 V Ag Ed)	Johnston
DesChamps, W. W. (2 EE)	Bishopville
Desgalier, O. (2 ME)†	Niagara Falls, N. Y.
DesPortes, J. A. (4 T)	Fort Mill
Devlin, J. R. (1 E)†	Greenwood
Dibble, A. C. (1 E)†	Orangeburg
Dickerson, A. A. (3 Agr)	McDonough, Ga.
Dickerson, G. L. (3 T)	Spartanburg
Dickinson, E. L. (1 A)†	Bishopville
Dicks, N. R. (4 T)	Barnwell
Dickson, J. B. (1 E)†	Anderson
Dickson, J. R. (1 E)†	York
Dillard, B. F. (1 T)	Greenville
Dillard, W. B. (2 Pre-Med)	Greenville
Dillard, W. C. (2 Pre-Med)	Six Mile
Dinkins, Edward (1 E)†	Sumter
Dixon, J. C. (2 Ag Engr)	Bishopville
Dixon, J. D. (1 V Ag Ed)†	Columbia
Dixon, J. H. (3 Pre-Med)	Anderson
Dixon, W. H. (2 Pre-Med)	Florence
Doar, J. P. (2 CE)	Greenville
Dobbins, R. J. (1 A)†	Hickory, N. C.
Dobbins, T. L. (1 Ag Engr)†	Townville
Dobson, C. B. (4 Hort)	Greer
Dobson, W. C. (2 TIE)	Central
Dodson, E. E. (1 E)†	Columbia
Donly, W. H. (3 Ag Ec)	Columbia
Dorman, J. E. (2 Pre-Med)	Conway
Dorn, O. G. (2 Ag Engr)	Sumter

Name and Course	Address
Dover, C. M. (1 E)†	Rock Hill
Drake, B. F. (1 A)	Williamston
Drake, R. S. (1 A)	Belton
Drawdy, C. F. (1 E)†	Anderson
Dreher, F. E. (1 E)†	West Columbia
Dreher, G. W. (1 V Ag Ed)†	Columbia
Drennan, R. F. (3 T)	Rock Hill
Drew, L. O. (1 Ag Engr)†	White Hall
Driver, A. H. (4 GS)	Aiken
DuBose, E. E. (4 T)	Oswego
DuBose, E. M. (2 ME)	Oswego
DuBose, Frank (2 V Ag Ed)	Camden
DuBose, M. E. (1 A)	Manning
Duckett, F. L. (1 E)†	Greenwood
Ducworth, E. T. (2 AH)	Anderson
Ducworth, W. W. (3 Agr)	Anderson
Dudley, A. C. (4 V Ag Ed)	Mullins
Duffie, H. Z. (1 V Ag Ed)†	Saluda
Dukes, A. D. (1 E)†	Branchville
Dukes, C. L. (1 V Ag Ed)†	St. George
Dukes, D. A. (1 A)†	Greelyville
Dukes, J. D. (2 Ch-Engr)	Orangeburg
Dukes, J. L. (4 CE)	St. George
Dukes, R. C. (4 EE)	Orangeburg
Duncan, C. R. (2 C)	Heath Springs
Dunham, C. F. (4 CE)	Anderson
Dunham, E. W. (4 T)	Durham, N. C.
Dunlap, C. K. (2 ME)	Hartsville
Dunlap, G. M. (4 T)	Tucapau
Dunn, A. B. (4 C)	Bethlehem, Pa.
Dunn, Claude (2 EE)	Rock Hill
Dunn, C. W. (2 Pre-Med)	Bethlehem, Pa.
Dunn, J. R. (1 A)†	Donalds
Dunn, L. E. (4 V Ag Ed)	Zebulon, Ga.
DuPre, F. A. (3 ME)	Abbeville
DuRant, E. C. (2 Pre-Med)	Sumter
Dusenbury, J. D. (3 Ag Ec)	Florence
Dysart, J. O. (2 T)	Greenville
Eaddy, C. M. (4 V Ag Ed)	Hemingway
Eaddy, L. L. (4 V Ag Ed)	Hemingway
Eaddy, W. H. (1 V Ag Ed)†	Hemingway
Earle, S. T. (2 Ar)	Greenville
Early, W. F. (4 GS)	Florence
Easterling, H. G. (1 E)†	Florence
Edens, J. W. (1 A)†	Sumter
Edmonds, J. L. (4 T)	Fallston, N. C.
Edmunds, S. D. (1 A)†	McCormick
Edwards, E. G. (3 Pre-Med)	Columbia
Edwards, G. T. (3 ME)	Columbia
Edwards, G. W. (3 AH)	Gresham
Edwards, J. A. (3 T)	Fountain Inn
Edwards, J. C. (3 T)	Seneca
Edwards, J. E. (2 ME)	Union
Edwards, J. L. (4 ME)	Florence
Edwards, J. R. (2 T)†	Darlington
Edwards, W. M. (1 V Ag Ed)†	Columbia
Elledge, L. D. (2 V Ag Ed)	Ware Shoals
Ellerbe, J. E. (2 EE)	Florence
Elliott, E. S. (2 V Ag Ed)	Mullins
Elliott, J. E. (2 I Ed)	Columbia
Ellis, C. W. (1 E)†	Brunswick, Ga.
Ellis, P. B. (1 Ch-Engr)†	Greenwood
Ellis, R. H. (2 CE)	Little River
Ellis, W. H. N. (3 Pre-Med)	Greenwood
Elphick, C. C. (4 C)	Greenville
Elvington, C. W. (2 I Ed)	Nichols
Ely, A. C. (1 E)†	Columbia
Emanuel, C. M. (1 V Ag Ed)†	Rembert
Embody, C. F. (4 TC)	Summit Hill, Pa.
Engel, H. R. (1 T)†	Charleston
Epps, D. E. (3 V Ag Ed)	Latta
Epps, E. T. (1 A)†	Kingstree
Epps, F. M. (1 V Ag Ed)	New Zion
Epps, J. C. (3 D)	Kingstree
Epps, J. W. (3 Ar)	Kingstree

Name and Course	Address
Epting, C. E. (3 Ar)	Greenville
Erwin, P. N. (3 Ar)	Albany, Ga.
Eskew, E. B. (2 A)	Anderson
Etheredge, H. M. (2 V Ag Ed)	Springfield
Evans, C. E. (3 I Ed)	Orangeburg
Evans, C. S. (1 Ch-Engr)†	Greelyville
Evans, F. I. (2 ME)	Cameron
Evans, J. Hayward (4 V Ag Ed)	Six Mile
Evans, J. Heriot (4 CE)	Bennettsville
Evans, M. G. (1 C)†	Andrews
Evans, P. C. (1 V Ag Ed)†	Elloree
Evans, W. E. (1 Pre-Med)†	Pendleton
Evans, W. J. (1 T)†	Dillon
Eve, Pinckney (4 D)	Burton
Fain, S. Z. (2 TC)	New York, N. Y.
Fairey, F. S. (1 Pre-Med)†	St. Matthews
Fairey, G. H. (2 A)	Kingstree
Fairey, J. K. (1 E)†	St. Matthews
Fant, C. H. (2 A)	Anderson
Fant, R. G. (2 Ar)†	Lockhart
Fant, S. F. (S)†	Seneca
Faris, E. M. (2 ME)	Rock Hill
Farr, R. E. (1 E)†	Watauga, Tenn.
Faulkner, T. C. (2 Agr)	McCormick
Fellers, C. B. (2 A)	Silverstreet
Fellers, H. H. (3 Agr)	Prosperity
Fennell, R. C. (3 V Ag Ed)	Loris
Fenters, F. M. (1 Pre-Med)†	Hemingway
Ferguson, B. B. (1 V Ag Ed)†	Sharon
Ferguson, B. E. (2 T)	Abbeville
Ferguson, J. G. (3 Ch-Engr)	Winnsboro
Ferris, L. R. (4 V Ag Ed)	Orangeburg
Fick, W. W. (2 GS)	DeWitt, N. Y.
Ficklin, M. T. (3 T)	Greenwood
Fickling, J. H. (1 E)†	Bamberg
Fisher, D. W. (2 ME)	Wilmington, N. C.
Fitch, W. C. (1 V Ag Ed)†	Lake City
Fleetwood, H. G. (4 T)	Clemson
Fletcher, B. A. (4 WD)	Rock Hill
Fletcher, G. L. (3 Ag Ec)	McColl
Fletcher, Nicholas (4 Ag Ec)	McColl
Fleu, F. W. (1 C)†	Fayetteville, W. Va.
Flink, H. H. (1 Ch-Engr)	Cos Cob, Conn.
Flowers, G. A. (1 Pre-Med)†	Hickory, N. C.
Flowers, H. S. (1 GS)†	Sumter
Floyd, Carl (2 ME)	Greenville
Floyd, G. W. (2 Ag Ec)	Conway
Floyd, L. O. (3 EE)	Scranton
Folk, K. S. (2 GS)	Holly Hill
Folsom, J. B. (2 ME)	Sumter
Fomby, H. C. (2 A)	Orangeburg
Forbes, B. C. (1 I Ed)†	Clover
Ford, F. T. (2 EE)	Charleston
Ford, J. M. (1 E)†	Clover
Ford, J. T. (3 A)	Baltimore, Md.
Ford, R. J. (2 Ch-Engr)	Wesleyville, Pa.
Ford, Z. T. (4 Agr)	Nichols
Forrester, H. S. (4 Ar)	Greenville
Forrester, W. W. (2 Ch-Engr)	Sumter
Forsythe, R. G. (S)	Hendersonville, N. C.
Fortunato, F. N. (3 T)	Bethlehem, Pa.
Foster, H. B. (3T)	Greenville
Foster, J. W. P. (4 GS)	Summerville
Foster, S. V. (3 V Ag Ed)	Gaffney
Foster, W. C. (3 I Ed)	Spartanburg
Foster, W. J. (2 ME)	Spartanburg
Fowler, F. B. (1 GS)	Union
Fowler, J. D. (3 D)	Fairmont
Fowler, R. H. (1 E)†	Columbia
Fowler, W. W. (1 Ar)†	Lockhart
Fox, C. B. (1 E)†	Lodge
Fox, F. M. (2 T)	Batesburg
Frank, Morton (4 WD)	Forest Hills, N. Y.
Franklin, J. H. (1 V Ag Ed)†	Morristown, Tenn.

Name and Course	Address
Franks, W. H. (2 ME)	Columbia
Free, B. D. (3 I Ed)	Ninety Six
Free, J. W. (1 Pre-Med)†	Jonesville
Freeman, B. L. (1 Ar)†	Anderson
Freeman, E. A. (4 C)	Anderson
Freeman, F. W. (1 E)†	Charleston
Freeman, P. E. (2 A)†	Steeds, N. C.
Freeman, P. N. (3 ME)	Charleston
Freeny, S. W. (1 Ed)	Annapolis, Md.
Frick, M. L. (1 E)†	Greenville
Fritts, G. H. (3 V Ag Ed)	Lenoir City, Tenn.
Frowein, J. N. (3 Ag Ec)	Spartanburg
Fuentes, Antonio (3 A)†	Rio Piedras, P. R.
Fulmer, H. P. (4 Agr)	Chapin
Furqueron, G. M. (2 Pre-Med)	McCormick
Futral, J. W. (2 ME)	Wadley, Ga.
Gabrels, J. L. (1 E)†	Spartanburg
Gage, Gaston, (S)	Clemson
Gage, T. W. (3 EE)	Anderson
Gailey, C. D. (1 A)	Iva
Gaillard, R. K. (2 A)	Eutawville
Gaines, J. A. (1 C)†	Glasgow, Ky.
Gall, V. R. (2 T)	Batesburg
Gallman, C. H. (2 T)	York
Galloway, W. A. (4 CE)	East Gadsden, Ala.
Galphin, George (1 A)†	Ninety Six
Galway, J. E. W. (2 ME)	Greenville
Gamble, J. B. (3 Pre-Med)	Turbeville
Gambrell, W. H. (1 Ch-Engr)†	Owings
Gantt, A. D. (1 Pre-Med)†	Pelion
Gardiner, W. W. (2 A)	Florence
Gardner, E. G. (4 Ar)	Lancaster
Gardner, F. R. (3 ME)	Savannah, Ga.
Gardner, L. E. (3 CE)	Chesterfield
Gardner, W. A. (4 Agr)	Hartsville
Garfinkel, Nathan (3 TC)	Charleston
Garland, D. A. (1 E)†	Waban, Mass.
Garner, J. A. (4 GS)	Hartsville
Garraux, J. H. (1 E)†	Greenville
Garrett, C. H. (1 GS)†	Greenville
Garrett, P. (1 E)†	Travelers Rest
Garrett, W. C. (3 GS)	Charlotte, N. C.
Garrison, T. E. (3 V Ag Ed)	Anderson
Garvin, N. E. (1 E)†	Greenville
Gatlin, L. E. (2 T)	Newberry
Gaudry, J. R. (1 E)†	Savannah, Ga.
Gay, M. F. (2 Ar)	Kershaw
Gee, Gaston, (1 A)†	Charlottesville, Va.
Genet, G. R. F. (3 C)	Georgetown
George, F. A. (2 EE)†	Hazleton, Pa.
Gerrard, C. D. (1 E)†	Anderson
Gettys, B. W. (3 ME)	Lugoff
Gettys, C. S. (1 E)†	Rock Hill
Gettys, E. M. (1 E)†	Rock Hill
Gettys, R. E. (3 Agr)	Lugoff
Gianpalo, N. J. (4 Ed)	Derby, Conn.
Gibert, J. M. (2 Ag Engr)	Willington
Gibson, F. M. (3 TC)	Greenville
Gill, B. E. (1 E)†	Florence
Gilmer, K. E. (1 TC)†	Anderson
Gilmer, J. B. (2 Ar)	Louisa, Va.
Gilmore, W. C. (3 WD)	Greenville
Gilmore, W. F. (1 E)†	Ravenel
Ginn, W. N. (4 ME)	Varnville
Gladden, T. W. (1 V Ag Ed)†	Lowrys
Gleason, R. N. (3 Agr)	Seneca
Glenn, B. F. (1 T)†	Anderson
Glenn, C. J. (2 T)	Pendleton
Glenn, G. R. (2 CE)	Anderson
Glenn, J. Davis (3 CE)	Fair Play
Glenn, J. Douthit (3 ME)	Pendleton
Glenn, J. P. (4 ME)	Anderson
Glenn, T. R. (1 E)†	Starr
Glymph, M. C. (1 V Ag Ed)†	Fair Play
Goblet, G. F. (3 I Ed)	Mt. Pleasant

Name and Course	Address
Godfrey, J. H. (3 T)	Fort Mill
Godley, W. C. (2 A)	Miley
Godsey, J. C. (4 Ch-Engr)	Laurens
Goers, C. K. (2 A)†	Philadelphia, Pa.
Goggans, W. H. (2 Pre-Med)	Newberry
Goldin, Milton (1 C)†	Charleston
Golding, E. V. (4 ME)	Waterloo
Good, J. D. (2 ME)	Sharon
Goodman, J. L. (2 CE)	Clemson
Goodman, J. M. (1 Ag Engr)†	Mountville
Goodman, J. R. (2 CE)	Clemson
Goodman, J. S. (2 EE)	Clemson
Goodman, S. B. (2 T)	Mountville
Goodwin, E. A. (1 A)†	Union
Gore, N. V. (4 T)	Asheville, N. C.
Goudelock, G. E. (1 T)	Hartsville
Goudelock, W. J. (1 T)†	Cateechee
Graham, C. C. (3 D)	Mt. Ulla, N. C.
Graham, J. H. (3 Agr)	Anderson
Graham, J. S. (2 T)	Donalds
Graham, R. L. (3 EE)	Greenville
Graham, W. A. (2 GS)	Salisbury, N. C.
Graham, W. H. (2 V Ag Ed)	Anderson
Gramling, F. W. (4 V Ag Ed)	Orangeburg
Grantham, D. L. (2 Ar)	Savannah, Ga.
Grantham, S. L. (1 V Ag Ed)†	Dillon
Graves, C. C. (3 Pre-Med)	Pageland
Graves, J. L. (3 V Ag Ed)	Ravenel
Graves, M. H. (1 Pre-Med)†	Pageland
Gray, B. E. (3 EE)	Charleston
Gray, J. B. (2 EE)	Greenville
Grayson, J. H. (3 GS)	Yonges Island
Green, T. E. (1 E)†	Greenville
Green, F. D. (3 Ent)	Rock Hill
Green, J. K. (1 T)	Taylors
Greene, C. L. (4 EE)	Williston
Greene, Wilson (2 Pre-Med)	Sumter
Gregg, F. A. (3 AH)	Mars Bluff
Gregg, H. R. (4 Agr)	Florence
Gregg, R. D. (1 E)†	Columbia
Gregory, A. H. (4 TC)	Greenville
Gregory, J. F. (4 C)	Pauline
Gregory, J. L. (4 T)	Lockhart
Gregory, P. A. (3 T)	Marietta, Ga.
Gregory, W. W. (3 T)	Inman
Grier, C. M. (1 E)†	Charlotte, N. C.
Grier, J. E. (1 E)†	Spartanburg
Griffin, B. L. (1 Pre-Med)†	Easley
Griffin, C. B. (1 C)†	Belton
Griffin, J. R. C. (3 T)	Anderson
Griffith, J. B. (3 V Ag Ed)	Liberty
Griffith, J. H. (1 E)†	Lancaster
Grimball, B. C. (1 E)†	Charleston
Grimball, D. E. (1 Pre-Med)†	Charleston
Grimball, H. G. (1 Ar)†	Johns Island
Grimes, T. E. (2 Pre-Med)	Sumter
Grist, J. D. (2 GS)	Sharon
Groce, L. A. (4 Ar)	Lyman
Grogan, R. L. (1 I Ed)†	Westminster
Groot, H. A. (2 C)	Jacksonville, Fla.
Guess, J. B. (4 D)	Denmark
Guest, T. F. (3 GS)	Marietta
Gunnels, W. F. (1 Ch-Engr)†	Bath
Guyton, P. V. (2 ME)	Pelzer
Guyton, R. A. (4 V Ag Ed)	Marion
Gwin, T. J. (2 A)	Augusta, Ga.
Haddon, F. J. 3 T)	Greenwood
Hagen, J. G. (1 T)†	Abbeville
Hagood, T. R. (1 C)†	Spartanburg
Hahn, H. T. (2 T)	Greenwood
Haigler, J. S. (1 Ar)†	Charleston
Hair, B. B. (4 Ag Ec)	Greenwood
Hall, C. W. (2 V Ag Ed)	Mt. Ulla, N. C.
Hall, R. T. (4 TC)	Cassatt
Hall, W. A. (4 GS)	Keyport, Wash.

Name and Course	Address
Hallman, W. E. (4 Ar)	Aiken
Haltiwanger, W. L. (1 A)†	Little Mountain
Hambright, C. I. (2 Ed)	Greenville
Hambright, P. R. (2 V Ag Ed)	Grover, N. C.
Hamer, J. R. (3 V Ag Ed)	Clio
Hamilton, Bruce (3 D)	Fort Mill
Hamilton, G. R. (4 D & Hort)	Anderson
Hamilton, J. E. (4 T)	Durham, N. C.
Hammett, L. O. (1 T)†	Anderson
Hammond, C. E. (3 EE)	Fairfax
Hammond, J. W. (1 E)†	Williamston
Hammond, L. C. (3 Agr)	Seneca
Hammond, R. M. (2 Ed)	Anderson
Hammond, W. J. (1 E)†	Elliott
Hance, L. H. (1 T)†	Lancaster
Hancock, D. W. (4 Ent)	Ruby
Handley, W. A. (1 V Ag Ed)†	LaGrange, Ga.
Hanvey, W. H. (2 V Ag Ed)	McCormick
Hardee, H. B. (1 GS)	Conway
Hardee, L. C. (1 A)†	Loris
Hardin, L. H. (3 ME)	Charleston
Hare, J. W. (1 C)†	Anderson
Hare, J. F. (2 GS)	Elmira, N. Y.
Harley, J. H. (2 CE)	St. George
Harling, R. E. (2 ME)	Rock Hill
Harmon, L. C. (4 TC)	Concord, N. C.
Harper, S. D. (4 CE)	Florence
Harper, S. M. (3 EE)	Andrews
Harper, W. E. (3 V Ag Ed)	Honea Path
Harrington, L. B. (3 Ag Ec)	Manning
Harris, J. B. (3 T)†	Greenwood
Harris, J. W. (1 V Ag Ed)†	Madison
Harris, R. T. (2 V Ag Ed)	Westminster
Harris, W. M. (3 V Ag Ed)	Westminster
Harrison, E. L. (3 ME)	Abbeville
Harrison, R. T. (1 E)†	Troy
Hartley, J. C. (4 EE & ME)	Batesburg
Harvard, L. L. (2 E)†	Spartanburg
Harvey, J. M. (2 Ch-Engr)	Jacksonville, Fla.
Hasell, S. M. (3 ME)	Charleston
Hasty, C. W. (1 V Ag Ed)†	Dillon
Hawkins, Alfred (4 CE)	Cliffside, N. C.
Hawkins, B. V. (4 Hort)	Campobello
Hawkins, F. G. (1 A)†	Greenville
Hawkins, F. J. (1 T)†	Greenville
Hawkins, J. K. (1 Ch-Engr)†	Greenwood
Hawkins, M. R. (2 EE)	Charleston
Hawkins, W. C. (3 TIE)	Central
Hayden, J. H. (1 A)†	Walterboro
Hayes, R. E. (1 V Ag Ed)†	Nichols
Hedden, F. H. (3 Ag Engr)	Walhalla
Hedden, J. P. (1 E)†	Walhalla
Hegler, T. C. (3 T)	Kershaw
Heinsohn, J. H. (3 GS)	Charleston
Hembree, B. E. (1 E)†	Anderson
Hemminger, J. M. (1 TC)†	Willington
Hemphill, J. C. (3 Ar)	Columbia
Hemphill, R. D. (1 E)†	Columbia
Hempstead, R. L. (3 Ch-Engr)	Atlanta, Ga.
Henderson, F. P. (1 T)†	Ninety Six
Henderson, J. C. (2 GS)	Greenville
Henderson, J. M. (1 E)†	Greenville
Henderson, J. R. (4 EE)	Verdery
Henderson, W. N. (4 Agr)	Ninety Six
Hendricks, L. N. (2 EE)	Clemson
Hendricks, S. E. (1 A)	Dacusville
Hendrix, E. W. (1 E)†	Greer
Hendrix, R. M. (4 V Ag Ed)	Greer
Henry, A. M. (1 Ar)	Clemson
Henry, G. C. (4 T)	Spartanburg
Henry, R. E. S. (3 ME)	Clemson
Henry, W. J. (3 TC)	Chester
Herlong, D. C. (3 V Ag Ed)	Johnston
Herlong, J. B. (4 V Ag Ed)	Johnston

Name and Course	Address
Herlong, J. E. (1 V Ag Ed)†	Saluda
Herlong, P. B. (2 V Ag Ed)	Johnston
Herndon, F. M. (4 T)	Hartwell, Ga.
Herring, J. C. (2 GS)	Anderson
Herrington, C. L. (4 Agr)	Waynesboro, Ga.
Hess, B. G. (3 Ent)†	Cohoes, N. Y.
Hester, B. F. (4 T)	Ellenton
Hester, H. E. (2 EE)	McCormick
Hester, Robert (S)	St. George
Hester, T. D. (2 CE)	Wagener
Hewin, L. M. (1 E)†	Greenville
Hiers, J. C. (1 A)†	Ehrhardt
Hickerson, F. R. (2 ME)	Morris Plains, N. J.
Hickerson, R. A. (4 T)	Morris Plains, N. J.
Hicks, L. B. (2 ME)	Charleston
Hicks, L. H. (4 V Ag Ed)	York
Hickson, E. L. (3 ME)	Cheraw
Higginbotham, J. B. (1 E)†	Anderson
Higgins, C. F. (2 Pre-Med)†	Easley
Higgins, C. R. (2 ME)	Easley
Higgins, H. S. (1 E)†	Franklin, N. C.
Higgins, J. C. (3 Ar)	Rock Hill
Hilburn, J. E. (3 T)	Dublin, Ga.
Hill, D. N. (4 T)	Abbeville
Hill, F. B. (1 A)†	Greenville
Hill, H. B. (4 GS)	Lake City
Hill, H. S. (1 A)†	Timmonsville
Hill, J. E. (1 A)†	Florence
Hill, J. F. (2 A)	Edneyville, N. C.
Hill, J. L. (1 Ag Engr)†	Florence
Hill, O. M. (2 ME)	Greenville
Hiller, W. H. (1 E)†	Columbia
Hinnant, P. K. (4 Ent)	Ridgeway
Hinson, A. E. (1 A)†	Summerton
Hinson, W. R. (1 Ch-Engr)†	Rock Hill
Hinton, O. T. (2 EE)	Pickens
Hipp, C. J. (1 GS)†	Greenwood
Hipp, J. C. (1 E)†	Spartanburg
Hite, C. W. (4 T)	Bennettsville
Hite, H. B. (2 V Ag Ed)	Batesburg
Hobson, F. C. (2 CE)	Clover
Hobson, J. H. (S)†	Belton
Hobson, W. M. (3 D)	Belton
Hodge, D. D. (1 E)†	Alcolu
Hodge, J. D. (1 E)†	Alcolu
Hodges, J. P. (3 Agr)	Blenheim
Hoffman, C. A. (2 Ch-Engr)	Kingston, Pa.
Hoffman, Ralph (2 A)	Swansea
Hogan, E. R. (3 V Ag Ed)	Ellerbe, N. C.
Hogg, J. A. (1 Ch-Engr)†	Greenville
Hogsed, R. A. (1 E)†	Cornelia, Ga.
Hogue, S. W. (2 ME)	Camden
Holcomb, J. W. (2 EE)†	Columbia
Holland, J. H. (1 A)†	Columbia
Holland, Max (1 E)†	Bowersville, Ga.
Holleman, J. T. (1 E)†	Turners Station, Ky.
Holley, E. B. (3 ME)	Aiken
Holley, F. L. (4 AH)	Aiken
Holley, H. E. (1 E)†	Aiken
Holliday, J. C. (3 Agr)	Liberty
Holliday, W. W. (3 Ag Ec)	Kingstree
Hollingsworth, C. K. (4 V Ag Ed)	Troy
Hollingsworth, J. L. (2 EE)	Greenwood
Hollis, H. W. (4 Agr)	Rock Hill
Holman, J. A. (2 CE)	Anderson
Holmes, F. S. (4 I Ed)	Denmark
Holmes, H. H. (3 Pre-Med)	Conway
Holmes, L. F. (1 A)†	Trenton
Holroyd, R. E. (4 Ar)	Anderson
Holt, E. E. (1 E)†	Spartanburg
Holtzendorff, L. G. (1 GS)†	Clemson
Holtzendorff, P. B. (4 GS)	Clemson
Hooks, A. V. (3 CE)	Columbia
Hooks, S. T. (2 Ar)	Goldsboro, N. C.
Hoover, E. F. (2 V Ag Ed)	North
Hooper, J. E. (3 V Ag Ed)†	Dillard, Ga.
Hoopes, B. W. (2 CE)	Reading, Pa.
Horne, A. C. (1 E)†	Bennettsville
Horne, H. G. (1 GS)†	Greenville
Horton, D. H. (1 A)†	Pendleton
Horton, F. H. (4 GS)	Columbia
Horton, J. H. (1 A)†	Pendleton
Horton, J. I. (4 GS)	Columbia
Horton, R. E. (4 Agr)	Pageland
Horton, T. M. (2 Pre-Med)	Pendleton
Horton, V. F. (3 V Ag Ed)	Angelus
Hough, J. S. (4 V Ag Ed)	Hartsville
Houghton, J. B. (2 GS)	Charleston
Howard, C. H. (2 T)	Batesburg
Howard, C. R. (3 TC)	North Augusta
Howard, F. C. (2 T)	Taylors
Howard, J. W. (4 T)	Greenville
Howell, C. C. (1 E)†	Troy, N. C.
Howell, G. M. (1 E)†	Clover
Howell, L. C. (1 E)†	Georgetown
Howell, M. R. (1 A)†	Lamar
Howell, R. F. (2 T)	Santuck
Howle, H. G. (1 E)†	Darlington
Hubbard, J. C. (3 WD)	Lancaster
Hudnall, M. B. (2 EE)	Sumter
Hudnell, Hilton (2 EE)	Suffolk, Va.
Hudson, J. E. (2 Pre-Med)	Greenville
Hufford, R. G. (2 ME)	Clemson
Huggin, F. E. (3 EE)	Gaffney
Huggins, J. T. (2 Pre-Med)	Johnsonville
Huggins, J. W. (1 Pre-Med)†	Johnsonville
Hughes, C. D. (S)†	Seneca
Hughes, R. A. (3 T)	Ninety Six
Hughes, S. C. (3 GS)	Hampton
Hughes, W. C. (2 Pre-Med)	Norway
Hughey, C. S. (2 V Ag Ed)	Greer
Hughey, H. D. (1 E)†	Greer
Huguenin, E. P. (3 V Ag Ed)	Ridgeland
Huiet, W. C. (2 V Ag Ed)	Johnston
Huiett, G. E. (1 V Ag Ed)†	Trenton
Humphries, G. E. (1 Ch-Engr)†	Jacksonville, Fla.
Hungerford, D. S. (2 A)	Spartanburg
Hunt, T. W. (1 V Ag Ed)†	Ridgeland
Hunter, E. D. (4 T)	Edisto Island
Hunter, J. R. (1 T)†	Lancaster
Hunter, M. R. (3 Pre-Med)	Gray Court
Hunter, R. V. (4 Ag Ec)	Ellenton
Hunter, William (2 CE)	Spartanburg
Huntley, D. M. (4 V Ag Ed)	Ruby
Hurst, G. H. (2 CE)	Sumter
Hutto, Edgar (1 E)†	St. George
Hyder, B. G. (3 Ar)	Gaffney
Immerman, Joseph (1 T)†	Paterson, N. J.
Inabinet, F. H. (4 Agr)	Orangeburg
Ingram, A. C. (2 Ag Ec)	Ridgeland
Ingram, A. M. (2 D)	Ridgeland
Ingram, C. H. (2 ME)	Hartsville
Ingram, C. O. (3 D)	Ridgeland
Irick, E. F. (3 GS)	Elloree
Irving, W. J. (3 Ag Ec)†	Albany, N. Y.
Irwin, S. P. (1 T)†	Spartanburg
Irwin, W. F. (1 A)†	Laurens
Ivey, F. M. (2 TC)	Savannah, Ga.
Ivey, J. D. (4 ME)	LaGrange, Ga.
Jackson, B. H. (1 C)†	Greenville
Jackson, C. C. (4 V Ag Ed)	Cassatt
Jackson, E. C. (4 V Ag Ed)	Starr
Jackson, H. L. (3 V Ag Ed)†	Campobello
Jackson, J. C. (3 V Ag Ed)	Edgefield
Jackson, J. P. (1 A)†	Sumter
Jackson, Nelson (3 WD)	Tryon, N. C.
Jackson, R. M. (1 Ch-Engr)†	Dillon
Jackson, R. N. (2 Ar)	Gray Court
Jackson, W. S. (2 V Ag Ed)	Manning

Name and Course	Address
Jacobs, D. G. (1 E)†	Gainesville, Ga.
Jacobs, G. S. (1 V Ag Ed)†	Georgetown
Jacobs, H. W. (1 E)†	Kingstree
Jacobs, O'Neal (2 Ar)	Laurens
James, B. M. (3 CE)	Depene, Wis.
James, C. A. (2 A)	Dumont, N. J.
James, R. S. (2 Ar)	Sumter
Jameson, C. R. (2 V Ag Ed)	Easley
Jameson, L. H. (3 WD)	Easley
Jansson, R. B. (1 E)†	Great Neck, N. Y.
Jaudon, R. H. (2 GS)	Spartanburg
Jeffcoat, C. E. (2 V Ag Ed)	North
Jenkins, C. D. (2 CE)	Simpsonville
Jenkins, M. E. (3 C)	Charleston
Jenkins, M. I. (4 AH)	Yonges Island
Jenkins, S. T. (4 T)	Mayodan, N. C.
Jenkins, T. T. (1 E)†	Beaufort
Jenkins, W. G. (3 EE)	Kline
Jenkins, W. T. (2 ME)	Rock Hill
Jennings, K. B. (3 Ar)	Charleston
Jessen, H. H. (3 GS)	Summerville
Johnson, A. B. (4 Ar)	Spartanburg
Johnson, E. M. (3 Ag Engr)	Aiken
Johnson, E. T. (1 E)†	Augusta, Ga.
Johnson, H. C. (3 ME)	Trenton
Johnson, H. E. (1 T)†	Greenville
Johnson, J. B. (3 Ar)	Rock Hill
Johnson, J. L. (1 Ch-Engr)†	Clinton
Johnson, R. C. (4 T)	Chappells
Johnson, W. A. (2 ME)	Hamlet, N. C.
Johnson, W. L. (1 A)†	Aiken
Johnston, A. E. (3 T)	Greenville
Johnston, T. E. (2 ME)	Clemson
Jolley, J. D. (1 T)†	Anderson
Jones, C. R. (1 E)†	Ashton
Jones, E. C. (2 ME)	Charleston
Jones, E. R. (1 Pre-Med)†	Bethune
Jones, F. M. (1 C)†	Lake City
Jones, G. R. (1 I Ed)†	Alcolu
Jones, George W. (1 V Ag Ed)†	Loris
Jones, Guy W. (4 V Ag Ed)	Greenville
Jones, H. C. (1 E)†	Spartanburg
Jones, H. E. (4 ME)	Pickens
Jones, H. Ligon (1 Ag Engr)†	Buffalo
Jones, H. Lloyd (1 A)†	Lake City
Jones, J. D. (4 T)	Buffalo
Jones, J. H. (4 Ag Engr)	Boiling Springs, N. C.
Jones, J. K. (1 A)†	Dacusville
Jones, L. T. (2 Agr)	Congaree
Jones, M. D. (1 V Ag Ed)†	Beaufort
Jones, M. W. (1 E)†	Spartanburg
Jones, R. Harris (1 E)†	Pendleton
Jones, R. Hayne (3 T)	Greenwood
Jones, R. L. (2 A)	Gaffney
Jones, S. J. (3 I Ed)	Walterboro
Jones, W. I. (3 Pre-Med)	Great Falls
Jones, W. S. (1 Ag Engr)†	Kershaw
Jordan, C. H. (1 A)†	Nichols
Jordan, C. R. (1 C)†	Marion
Jordan, D. R. (1 E)†	Spartanburg
Jordan, H. L. (1 E)†	Seneca
Jordan, J. E. (4 V Ag Ed)	Jefferson
Jordan, L. R. (3 T)	Columbia
Jordan, J. J. (1 Pre-Med)†	Myrtle Beach
Josselson, Ben (2 A)	Yemassee
Joye, C. M. (1 T)†	Columbia
Joyner, R. S. (1 E)†	Ward
Kay, C. W. (3 T)	Anderson
Kay, R. A. (2 GS)	Anderson
Kearse, F. M. (4 AH)	Ehrhardt
Kellett, J. E. (2 A)	Fountain Inn
Kelley, J. A. (3 Ar)	Liberty
Kelley, L. W. (1 Ag Engr)†	Lake City
Kelly, J. F. (2 T)	Anderson
Kelly, J. G. (4 T)	Rock Hill

Name and Course	Address
Kenerly, Ralph (1 Ed)†	Decatur, Ga.
Kennedy, E. P. (1 T)	Summerton
Kennedy, H. L. (1 GS)†	Laurens
Kennedy, H. R. (1 E)†	Union
Kennerty, R. J. (1 Ch-Engr)†	Charleston
Kenney, R. E. (1 Pre-Med)†	Aiken
Kerchmar, A. P. (4 Ed)	Bethlehem, Pa.
Kerr, W. E. (2 A)	Columbia
Ketchum, W. J. (1 Ch-Engr)†	Savannah, Ga.
Keys, J. E. (2 GS)	Walhalla
Kezziah, J. R. (2 T)	Pageland
Killingsworth, T. E. (2 ME)	Aiken
Kimball, B. E. (1 E)†	Columbia
Kimbrell, M. R. (4 EE)	Charlotte, N. C.
Kinard, W. L. (1 V Ag Ed)†	Ninety Six
Kinder, W. C. (3 Ar)	Kingstree
King, A. P. (4 Agr)	Ninety Six
King, G. E. (2 V Ag Ed)	McBee
King, M. L. (2 C)	Clemson
King, T. R. (1 Pre-Med)†	McBee
King, W. B. (1 V Ag Ed)	Conway
King, W. H. (1 TC)†	Ninety Six
King, W. L. (2 ME)	Pendleton
Kirby, G. W. (4 T)	Greenville
Kirby, H. L. (2 ME)	Union
Kirkland, R. W. (4 ME)	Newberry
Kirkpatrick, O. S. (4 V Ag Ed)	Great Falls
Kirven, E. M. (1 A)†	Darlington
Kirvin, W. W. (3 Ag Engr)	Darlington
Kiser, J. P. (2 GS)	Bowman
Kitchens, R. L. (1 A)†	Laurens
Kivett, T. L. (4 Ar)	Greenville
Klinck, J. M. (3 GS)	North Augusta
Klugh, A. M. (2 Pre-Med)	Anderson
Klugh, T. S. (4 T)	Clemson
Kneece, J. D. (3 Ag Ec)	Gilbert
Knight, A. M. (1 A)†	Honea Path
Knight, B. B. (2 ME)	Greenville
Knight, C. W. (1 A)†	Princeton
Knight, S. A. (2 Ag Engr)	Summerville
Knipe, C. J. (2 A)	Bethlehem, Pa.
Knox, J. G. (1 GS)†	Richburg
Konduros, G. G. (2 T)	Anderson
Konduros, P. G. (1 E)†	Anderson
Koontz, F. W. (1 Ar)†	Salisbury, N. C.
Kratzer, B. E. (2 EE)	Bethlehem, Pa.
Kronstadt, Reuben (4 C)	Bronx, N. Y.
LaBree, A. M. (1 E)†	Bishopville
Lachicotte, A. S. (3 TC)	Pawleys Island
Ladd, D. C. (2 EE)	Dawkins
LaGrone, W. E. (2 ME)	Johnston
Lancaster, Stanley (3 T)	Spartanburg
Lane, E. E. (2 V Ag Ed)	Mullins
Lane, J. V. (3 GS)	Dillon
Lane, T. L. (2 A)	Lamar
Lang, E. R. (2 GS)	Swampscott, Mass.
Langford, R. H. (4 EE)	Saluda
Lanham, W. J. (2 A)	Edgefield
LaRoche, E. A. (3 T)	Johns Island
Lashley, W. A. (1 A)†	Marion
Law, W. C. (4 GS)	Hartsville
Lawhon, B. P. (2 CE)	Hartsville
Lawrence, J. M. (3 Ag Ec)	Seneca
Lawson, J. B. (1 E)†	Sandy Springs
Laye, H. M. (1 E)†	Seneca
Lazar, J. T. (2 A)	Florence
Leake, F. S. (2 D)	Fountain Inn
Leckie, W. R. (1 TC)†	Chester
Lee, C. M. (1 E)†	Myrtle Beach
Lee, D. C. (1 T)†	Whitmire
Lee, E. P. (1 E)†	Anderson
Lee, R. E. (1 Pre-Med)	Alcolu
Lee, W. K. (3 ME)	Greenville
Legare, E. V. (3 Hort)	Johns Island
Leitner, F. W. (1 E)†	Aiken

Name and Course	Address
LeMaster, H. H. (3 Agr)	Gaffney
LeMaster, H. L. (4 AH)	Gaffney
Lenoir, D. G. (1 E)†	Sumter
Leonard, B. R. (3 V Ag Ed)	Donalds
Leonard, W. A. (1 V Ag Ed)	Woodruff
Leonhirth, William (4 T)	Sumter
Leppard, B. A. (2 ME)	Greenville
LeRoy, M. R. (2 C)	Greenwood
Lesemann, K. J. (1 E)†	Charleston
Lesesne, C. B. (3 GS)	Columbia
Lesesne, E. H. (4 CE)	Charleston
Lester, J. R. (3 Agr)	Newberry
Lever, J. J. (4 Ag Ec)	West Columbia
Lever, J. Q. (3 CE)	Cayce
Levine, L. J. (3 EE)	Lake City
Leventis, A. P. (1 E)†	Charleston
Lewis, A. D. (3 Agr)	Aynor
Lewis, J. E. (1 T)†	Columbia
Lewis, Y. G. (2 A)	Blackstock
Lide, F. M. (1 E)†	Hartsville
Lightsey, J. H. (3 Ag Engr)	Brunson
Lightsey, J. M. (1 A)†	Fairfax
Ligon, J. G. (1 E)†	Heath Springs
Ligon, L. S. (2 T)	Greenville
Ligon, W. S. (3 T)	Anderson
Linder, B. E. (3 V Ag Ed)	Gaffney
Lindler, H. R. (3 Ag Ec)	Chapin
Lindler, R. E. (1 E)†	Chapin
Lindsay, J. B. (3 CE)	Clemson
Lindsay, M. D. (2 GS)	Clemson
Liner, R. A. (2 T)	Greenwood
Link, R. A. (3 C)	Abbeville
Little, H. T. (1 E)†	Laurens
Little, J. F. (4 T)	Belton
Little, J. M. (1 V Ag Ed)†	Camden
Littlejohn, A. C. (4 GS)	Jonesville
Littlejohn, W. M. (1 E)†	Raleigh, N. C.
Litton, W. H. (1 E)†	Washington, D. C.
Livingston, G. F. (4 Ch-Engr)	Leesville
Livingston, W. D. (2 TC)	Charleston
Locklair, E. L. (2 V Ag Ed)	Great Falls
London, J. R. (4 I Ed)	Rock Hill
Long, H. E. (2 Pre-Med)	Leesville
Long, J. K. (1 Pre-Med)†	Greenwood
Long, J. T. (2 EE)	Piedmont
Long, R. F. (3 ME)	Bethlehem, Pa.
Long, Sam (4 ME)	Chesterfield
Longtin, K. W. (1 V Ag Ed)†	Teaneck, N. J.
Loshbough, L. F. (2 ME)	Chicago, Ill.
Lotz, M. M. (1 Ag Engr)†	Summerville
Loughlin, W. J. (3 ME)	Cos Cob, Conn.
Lowe, W. H. (4 T)	Caroleen, N. C.
Lowman, C. B. (2 V Ag Ed)	Columbia
Lucius, C. G. (3 AH)	Springfield
Luke, C. W. W. (3 CE)†	Honolulu, T. H.
Lupo, T. E. (1 V Ag Ed)†	Green Sea
Lynch, R. M. (4 ME)	East Orange, N. J.
Lynn, M. H. (4 Agr)	Richburg
Lytton, J. L. (3 Ar)	Cheraw
Lytton, J. O. (1 A)	Gastonia, N. C.
Lytton, K. G. (4 Agr)	Gastonia, N. C.
McAdams, D. A. (3 T)	Iva
McAlister, P. W. (4 T)	Greenville
McArthur, J. D. (1 TC)†	Anderson
McBee, L. S. (1 T)†	Greenville
McBee, W. D. (1 T)†	Greenville
McCallum, J. B. (1 V Ag Ed)†	McColl
McCarthy, J. J. (2 ME)	Manasquan, N. J.
McClam, Marvin (2 V Ag Ed)	Leo
McClam, R. L. (4 V Ag Ed)	Leo
McClanahan, W. A. (4 C)	Spartanburg
McClure, R. C. (1 E)†	Anderson
McComb, J. T. (2 A)	Troy
McConnell, F. F. (3 C)	Anderson
McCord, H. A. (1 TC)†	Greenwood
McCord, Z. H. (1 GS)†	Hodges
McCormick, J. D. (2 V Ag Ed)	North
McCorsley, E. F. (2 C)	Little River
McCoy, F. B. (1 E)†	Aiken
McCoy, J. H. (3 Ar)	Sumter
McCoy, W. T. (4 T)	Camden
McCraw, B. M. (1 A)†	Gaffney
McDaniel, J. H. (1 A)†	Travelers Rest
McDaniel, W. E. (3 Pre-Med)	Pelzer
McDavid, R. B. (2 A)	Pelzer
McDonald, J. B. (1 T)†	Bolton, Ga.
McDonald, J. N. (2 A)	Hartsville
McDonald, W. S. (3 GS)	Georgetown
McDowell, E. B. (4 V Ag Ed)	Kershaw
McDowell, N. O. (2 CE)	Greenville
McElveen, J. V. (2 A)	Cades
McElveen, N. R. (2 T)	Alcolu
McElveen, R. H. (1 Pre-Med)†	Columbia
McEntire, F. A. (1 Ch-Engr)†	Calhoun
McFaddin, Douglass (3 Agr)	New Zion
McFall, G. R. (4 I Ed)	Pickens
McFalls, D. L. (1 ME)	Orangeburg
McGill, H. T. (2 Ch-Engr)	Kingstree
McInnis, D. B. (2 A)	Clio
McIntosh, W. A. (4 C)	Summerville
McKagen, O. H. (4 V Ag Ed)	Kershaw
McKee, L. G. (2 C)	Chester
McKeown, A. B. (3 Ch-Engr)	Chester
McKeown, W. H. (4 T)	Chester
McKenzie, R. K. (1 E)†	Lake City
McKenzie, W. M. (1 GS)†	Lake City
McKesson, E. L. (4 Ag Engr)	Petersburg, Va.
McKnight, B. G. (4 GS)	Blythewood
McLane, J. C. (1 E)†	Newberry
McLaughlin, J. J. (4 ME)	Charleston
McLaurin, D. P. (1 E)†	Cheraw
McLean, C. S. (3 T)	Greer
McLean, W. K. (4 V Ag Ed)	Blythewood
McLendon, E. K. (3 ME)	Columbia
McLeod, G. K. (2 CE)	Timmonsville
McLeod, J. P. (2 T)	Greenville
McLeod, R. K. (3 GS)	Sumter
McLeod, R. R. (4 GS)	Hartsville
McLure, J. W. (2 CE)	Union
McMahan, E. O. (4 C)	Laurinburg, N. C.
McMakin, G. C. (S)	Wellford
McMaster, J. F. (4 T)	Winnsboro
McMaster, S. R. (1 A)†	Winnsboro
McMillan, H. O. (2 Ag Engr)	Minneapolis, Minn.
McMillan, J. F. (3 TC)	Clinton
McMullan, W. O. (1 T)†	Winder, Ga.
McNair, H. S. (4 T)	Patrick
McNair, R. E. (1 GS)†	Jamestown
McNair, W. H. (4 Agr)	Gable
McNeill, F. P. (1 A)†	Abbeville
McRae, J. R. (2 A)	Minturn
McTeer, T. A. (3 CE)	McClellanville
McWhite, B. C. (1 E)†	Abbeville
McWilliams, James (2 CE)	New York, N. Y.
Mace, J. S. (4 Ch-Engr)	Charleston
MacMurphy, W. C. (2 ME)	Charleston
Macomson, P. T. (2 A)	Spartanburg
Macpherson, W. J. (3 ME)	Brunswick, Ga.
Maddox, J. W. (2 EE)†	Beaufort
Mahon, F. W. (1 E)†	Greenville
Malcomson, R. S. (1 E)†	So. Swansea, Mass.
Maness, H. M. (2 GS)	Biscoe, N. C.
Maness, L. E. (4 CE)	Georgetown
Manly, J. B. (2 EE)	Anderson
Mann, J. G. (1 E)†	Greenville
Mann, P. H. (2 EE)	Abbeville
Manning, L. V. (1 V Ag Ed)†	Starr
Mappus, J. H. (2 Ch-Engr)	Charleston
Marbury, F. G. (1 A)†	Albany, Ga.

Name and Course	Address
Marsh, W. R. (2 A)	Camden
Marshall, A. W. (1 T)	Greenville
Marshall, J. L. (1 T)†	Camden
Marsters, F. H. (1 Ch-Engr)†	Erie Pa.
Martin, D. O. (2 V Ag Ed)	Pendleton
Martin, E. E. (4 Hort)	Gray Court
Martin, E. F. (4 CE)	New York N. Y.
Martin, J. A. (3 V Ag Ed)†	Westminster
Martin, J. C. (S)	Chesnee
Martin, J. H. (1 T)†	Easley
Martin, L. C. (4 Ag Ec)	Walhalla
Martin, R. F. (2 ME)	Greenville
Martin, R. R. (2 ME)	Belton
Martin, T. M. (3 AH)	Pineville
Martin, W. D. (2 A)	Piedmont
Martin, W. E. (1 T)	Greenville
Martin, W. P. (1 E)†	Columbia
Martin, W. R. (1 I Ed)†	Spartanburg
Marvin, J. H. (4 T)	Lobeco
Marvin, J. M. (1 E)†	Yemassee
Marvin, O. D. (3 Ar)	Yemassee
Marvin, R. E. (3 Hort)	Ritter
Mason, J. L. (3 V Ag Ed)	Westminster
Mason, R. H. (1 A)†	Pacolet Mills
Matheson, Kenneth (2 T)	Cheraw
Mathias, F. T. (3 V Ag Ed)	Lexington
Mathis, D. T. (1 A)†	Augusta, Ga.
Matthews, J. S. (1 E)†	Rock Hill
Matthews, L. O. (1 E)†	Eastover
Matthews, W. B. (4 Hort)	Orlando, Fla.
Mauldin, C. W. (4 EE)†	Greenville
Mauldin, J. A. (3 T)	Greenville
Mauldin, J. O. (1 E)†	Greenville
May, J. D. (1 E)†	Donalds
May, R. J. (1 E)†	Greenwood
Maybin, A. H. (3 ME)	Whitmire
Mayer, A. F. (2 C)	Taunton, Mass.
Maynard, A. L. R. (2 EE)	Bethune
Maynard, B. A. (4 AH)	Florence
Mayne, W. W. (1 CE)	Winder, Ga.
Mays, H. R. (1 Pre-Med)†	Columbia
Mays, O. A. (3 Pre-Med)†	Columbia
Means, B. C. (1 E)†	Asheville, N. C.
Meeks, C. D. (3 ME)	Anderson
Mellichamp, L. R. (2 EE)	Anderson
Merritt, C. F. (1 Ch-Engr)†	Piedmont
Merritt, H. N. (3 V Ag Ed)	Lake City
Merritt, W. E. (3 GS)	Washington, Ga.
Meyers, A. L. (2 Pre-Med)	Florence
Mikell, J. P. (1 A)†	Edisto Island
Miley, G. F. (2 V Ag Ed)	Brunson
Milford, L. W. (2 Pre-Med)	Clemson
Milhous, H. C. (2 ME)	Andrews
Millar, R. H. (1 E)†	Charleston
Miller, A. B. (1 TC)†	Chester
Miller, James H. (3 Ar)	Johns Island
Miller, John H. (2 T)	Greenville
Miller, Joseph H. (1 A)†	Memphis, Tenn.
Miller, W. Henderson (2 EE)	Waterloo
Miller, W. Henry (2 T)†	Greenville
Milton, S. J. (3 Ch-Engr)	Charleston
Mimms, C. M. (1 Ag Engr)†	Elliott
Mims, E. H. (3 GS)	Columbia
Mims, G. R. (2 ME)	Florence
Mims, W. Z. (1 E)†	Lamar
Minnis, H. D. (2 CE)	Charlotte, N. C.
Minton, W. F. (3 CE)†	Lewiston, N. C.
Mintz, J. M. (1 E)†	East Haven, Conn.
Mitchell, F. D. (1 E)†	Seneca
Mitchell, J. M. (2 Ar)	Charleston
Mixon, James A. (2 A)	McCormick
Mixson, Joe A. (1 GS)†	Calhoun
Moise, McFaddin (1 GS)†	Sumter
Moise, R. B. (2 ME)	Sumter
Momeier, G. H. (2 TC)	Charleston
Monk, F. S. (2 T)	Columbus, Ga.
Montgomery, G. S. (1 T)†	Spartanburg
Montgomery, R. M. (1 TC)†	Asheville, N. C.
Montgomery, R. R. (1 E)	Woodruff
Moody, Cecil (1 E)†	Dillon
Moody, J. L. (1 GS)†	Asheville, N. C.
Moore, B. B. (2 V Ag Ed)	Gaffney
Moore, E. L. (4 EE)	Broxton, Ga.
Moore, G. T. (3 Ar)	Greenville
Moore, M. D. (2 T)	Enoree
Moore, R. N. (3 V Ag Ed)	Calhoun
Moore, W. A. (2 ME)	La France
Morgan, C. C. (2 GS)	McCormick
Morgan, C. H. (4 T)†	Greenville
Morgan, Fred (2 V Ag Ed)	Central
Morgan, R. D. (2 V Ag Ed)	Springfield
Morgan, R. E. (2 EE)	Plum Branch
Morgan, S. C. (4 Agr)	Central
Morris, L. D. (3 T)	Olar
Morris, R. D. (1 E)†	Anderson
Morris, R. F. (2 T)	Charlotte, N. C.
Morris, T. R. (1 E)†	Hickory, N. C.
Morris, W. L. (2 A)	Columbia
Morrison, A. F. (1 T)†	Gainesville, Ga.
Morrison, C. J. (2 EE)	Pamplico
Morrow, J. R. (2 GS)†	Colorado Springs, Colorado
Moses, H. A. (1 E)†	Sumter
Moses, V. M. (1 E)†	Sumter
Moss, T. C. (2 A)	Cameron
Mowry, E. M. (1 E)†	Orangeburg
Mueller, Kurt (S)	Clemson
Muldrow, H. G. (2 T)	Mayesville
Mullen, C. V. (2 A)	Charleston
Muller, G. F. (1 T)†	Bythewood
Mullikin, Robert (3 A)†	Liberty
Mullins, W. A. (3 T)	Sylacauga, Ala.
Mundy, H. A. (2 A)	Abbeville
Murchison, C. A. (1 T)†	Anderson
Murray, E. H. (1 E)†	Orangeburg
Murray, F. H. (1 E)†	Sumter
Musselman, W. G. (1 E)†	Bethlehem, Pa.
Murph, J. L. (4 CE)	Seneca
Myers, J. B. (3 V Ag Ed)	Orangeburg
Myers, J. H. (4 CE)	Seneca
Myers, J. M. (2 Ag Engr)	Orangeburg
Myers, P. E. (2 Pre-Med)	Moncks Corner
Myers, R. D. (3 ME)	Orangeburg
Nalley, A. C. (4 T)	Easley
Nance, P. M. (2 GS)	Anderson
Neely, R. C. (2 A)	Waynesboro, Ga.
Neil, J. M. (4 T)	Rock Hill
Nelson, H. N. (3 GS)	Charleston
Nelson, S. G. (1 E)†	Maplewood, N. J.
Nesbitt, J. O. (2 ME)	Pittsburgh, Pa.
Neville, McCurry (4 GS)	Walhalla
New, J. R. (3 ME)	Greenville
Newell, J. C. (4 Ag Engr)	Hemingway
Newman, R. E. (2 Ag Engr)	McBee
Newton, W. M. (1 Pre-Med)†	Spartanburg
Nexsen, S. M. (3 Ag Ec)	Kingstree
Nickles, L. H. (3 ME)	Donalds
Nickles, W. B. (4 Agr)	Hodges
Nichols, S. B. (1 C)†	Savannah, Ga.
Nilson, H. A. (4 Ar)	Walterboro
Nims, J. W. (3 ME)	Lancaster
Noel, T. W. (1 E)†	Rock Hill
Noland, L. P. (1 I Ed)†	Washington, D. C.
Norris, J. E. (1 E)†	Vance
Norris, J. P. (1 E)†	Sumter
Norris, R. E. (2 V Ag Ed)	Conway
Norton, G. C. (1 C)†	Marion
Nunnery, E. W. (2 V Ag Ed)	Great Falls
O'Bannon, H. L. (2 EE)	Barnwell
O'Brien, G. J. (3 Ar)	Columbia

Name and Course	Address
O'Dell, D. G. (3 C)	Spartanburg
O'Dell, W. T. (2 V Ag Ed)	Easley
Odom, C. T. (2 V Ag Ed)	Elko
O'Driscoll, W. C. (4 EE)	Charleston
Oeland, E. E. (1 E)†	Greenville
Oliver, G. E. (2 T)	Clover
O'Neal, M. T. (1 A)†	Anderson
O'Neal, S. C. (3 Agr)	Fairfax
Onley, W. O. (1 E)†	Columbia
Orahood, E. G. (2 EE)	Sandersville, Ga.
Oricko, M. A. (4 CE)	Bethlehem, Pa.
Osborne, E. L. B. (1 GS)†	Hardeeville
Osborne, J. H. (4 CE)	Hardeeville
Osteen, D. W. (1 T)†	Greenville
Osteen, R. T. (4 TC)	Greenville
O'Shields, W. R. (4 T)	Seneca
Ousley, W. K. (1 E)†	Spartanburg
Outz, George (4 V Ag Ed)	Fair Play
Owen, S. E. (4 T)	Batesburg
Owen, W. A. (1 E)†	Salisbury, N. C.
Owen, W. C. (4 V Ag Ed)	Central
Pace, J. E. (3 AH)	Gresham
Padgett, W. H. (3 CE)	Columbia
Painter, H. L. (3 V Ag Ed)	Chesnee
Palmer, G. C. (1 E)†	Greenville
Palmer, G. E. (3 GS)	Allendale
Palmer, R. A. (1 E)†	Florence
Palmer, W. B. (1 A)†	Gaffney
Park, R. H. (1 E)†	Greenwood
Park, W. C. (3 EE)	Winston-Salem, N. C.
Parker, F. L. (4 EE & ME)	Charleston
Parker, H. M. (1 A)†	Sumter
Parker, J. A. (2 T)	Hartsville
Parker, J. R. (2 Agr)	Seneca
Parker, R. W. (1 I Ed)†	Seneca
Parker, T. M. (3 CE)	Sumter
Parkinson, W. W. (S)†	Charlotte, N. C.
Parks, J. B. (4 EE)	Fountain Inn
Parks, R. G. (1 Ar)†	Hickory, N. C.
Parks, R. H. (2 Ag Engr)	Newberry
Parks, W. H. (2 ME)	Hickory, N. C.
Parler, J. E. (2 A)	Beaufort
Parr, C. B. (1 Pre-Med)†	Newberry
Parris, C. A. (1 E)†	Blacksburg
Parris, J. W. (2 A)	Inman
Parrish, B. C. (3 T)	Easley
Parrish, H. G. (2 TC)	Laurens
Parrott, D. L. (4 Ar)	Central
Parsons, A. E. (1 A)†	Andrews
Parthemos, N. S. (S)†	Abbeville
Parvin, R. H. (1 E)†	Manatee, Fla.
Pasley, J. H. (3 T)	Alexander City, Ala.
Pate, Elilee (4 Ag Engr)	Camden
Pate, J. B. (2 A)	Monroe, N. C.
Pate, R. M. (1 E)†	Clio
Patterson, C. W. (2 ME)	Greenville
Paul, H. C. (1 E)†	Lancaster
Paulling, B. M. (4 EE)	St. Matthews
Payne, H. B. (2 Ar)	Elberton, Ga.
Payne, H. S. (1 E)†	Cartersville, Ga.
Payne, J. B. (2 A)	Piedmont
Payne, W. E. (2 T)	Piedmont
Pearce, D. F. (1 C)†	Greenville
Pearce, R. R. (4 GS)	Columbia
Pearlstine, I. M. (2 Ar)	St. Matthews
Pedrosa, Cecilio (1 Pre-Med)†	San Juan, Puerto Rico
Peek, J. M. (1 GS)	Blacksburg
Peirce, W. S. (1 E)†	Attleboro, Mass.
Pelham, W. E. (4 C)	Montgomery, Ala.
Pence, L. E .(2 V Ag Ed)	Tatum
Perkins, G. O. (2 EE)	Philadelphia, Pa.
Perrone, A. J. (3 EE)	San Juan, P. R.
Perry, G. T. (1 E)†	Gresham
Perry, J. W. (2 A)	Calhoun

Name and Course	Address
Perry, R. A. (3 Agr)	Gresham
Perry, R. E. (3 Pre-Med)	Savannah, Ga.
Perry, R. L. (1 E)†	Columbus, Ga.
Perry, T. C. (2 T)	Columbus, Ga.
Peterson, T. E. (3 T)	Spartanburg
Pettigrew, J. C. (3 Hort)	Hodges
Pettit, A. E. (2 CE)	Greer
Petty, D. M. (3 ME)	Bethlehem, Pa.
Phillips, A. F. (1 Ch-Engr)†	Greenville
Phillips, Joel (2 ME)	Iva
Phillips, Robert (1 Pre-Med)†	Glenn Springs
Phillips, S. F. (3 Ag Ec)	Lancaster
Pickens, N. D. (4 C)	Sencea
Pierce, H. W. (2 Ed)	Decatur, Ga.
Pike, W. B. (1 A)†	Orangeburg
Pinson, J. R. (1 E)†	Greenville
Pinson, W. C. (3 I Ed)	Greenwood
Pitchford, C. W. (4 CE)	Walhalla
Pitts, J. J. (4 Agr)	Newberry
Pitts, J. W. (3 Pre-Med)	Saluda
Pitts, P. L. (2 TC)	Clinton
Pitts, W. M. (1 E)†	Camden
Platt, L. E. (1 A)†	Meggett
Plumblee, W. H. (2 V Ag Ed)	Greer
Plunkett, E. L. (4 EE)	Ft. Moultrie
Plyler, G. P. (1 V Ag Ed)†	Columbia
Poe, W. N. (3 CE)	Greenville
Polatty, J. G. (2 ME)	Portsmouth, Va.
Poole, C. B. (4 ME)	Gaffney
Poole, L. H. (2 T)	Gaffney
Poole, R. F. (1 Pre-Med)†	Clemson
Pope, C. J. (4 T)	Charleston
Porter, W. B. (1 T)†	Winnsboro
Poston, R. F. (1 E)	Charleston
Potter, C. L. (4 Ar)	Tucapau
Powell, F. L. (1 Ag Engr)†	Hartsville
Powell, R. F. (2 Ed)	Walhalla
Powers, J. T. (3 Ar)	Summerville
Pratt, W. A. (1 Ch-Engr)†	Greenville
Prentiss, W. O. (4 Agr)	McClellanville
Presher, C. H. (1 E)†	Anderson
Price, G. M. (1 A)†	Abbeville
Price, G. W. (1 I Ed)†	Canton, N. C.
Price, H. A. (1 V Ag Ed)†	Aynor
Price, J. E. (1 V Ag Ed)	Wolfton
Price, J. R. (1 E)†	Buffalo
Price, V. L. (4 GS)	Walterboro
Prichard, H. D. (4 Ag Engr)	Westminster
Prince, J. A. (1 TIE)	Abbeville
Prince, R. S. (1 A)†	Abbeville
Propst, J. H. (2 TC)	Aiken
Propst, R. C. (4 Ch-Engr)	Aiken
Propst, W. S. (2 GS)	Sumter
Puette, C. A. (2 V Ag Ed)	Campobello
Pursley, L. F. (1 I Ed)†	Clover
Pyles, LaVern (2 CE)	Washington, D. C.
Quarles, W. Y. (1 T)†	Abbeville
Quattlebaum, J. M. (2 Ch-Engr)	Columbia
Quinn, J. W. (3 T)	St. Matthews
Rabb, J. M. (3 CE)	Greenville
Rabb, R. O. (2 ME)	Easley
Rader, D. H. (1 E)†	Columbia
Rader, J. F. (3 EE)	Columbia
Radzivill, Edward (2 Ch-Engr)	Brooklyn, N. Y.
Ragsdale, E. V. (2 A)	Blairs
Ragsdale, R. E. (2 T)	Pelzer
Ragsdale, W. B. (1 T)†	Pelzer
Rain, F. M. (2 D)	Florence
Raley, J. O. (1 Ar)†	Cheraw
Rambo, F. E. (1 E)†	Panama City, Fla.
Ramey, R. L. (2 A)	Mountain Rest
Ramsey, M. H. (4 T)	Anderson
Randall, R. D. (3 CE)	Rock Hill
Rankin, G. D. (3 V Ag Ed)	Saluda

Name and Course	Address
Rankin, J. A. (4 V Ag Ed)	Allsbrook
Rankin, J. J. (4 D)	Tamassee
Rankin, J. T. (4 EE)	Charlotte, N. C.
Rast, S. M. (1 Pre-Med)†	Manning
Ratcliff, N. B. (3 ME)	Bethune
Rawls, L. T. (2 Ar)	Columbia
Rawson, Roger (1 E)†	Cincinnati, Ohio
Ray, A. B. (2 GS)	Greenville
Reaves, A. L. (4 EE)	Bishopville
Redfern, R. B. (4 V Ag Ed)	Mt. Croghan
Reece, J. I. (3 V Ag Ed)	Pickens
Reel, J. W. (1 E)†	Edgefield
Reece, C. A. (2 TC)	Rock Hill
Reich, K. F. (1 C)†	Columbia
Reinhardt, R. C. (2 WD)	Newton, N. C.
Renken, W. A. (2 GS)	Charleston
Rentz, A. W. (1 E)†	Columbia
Reynolds, B. M. (1 A)†	Bennettsville
Reynolds, C. M. (2 D)	Clemson
Reynolds, E. H. (1 T)†	Columbia
Reynolds, E. M. (2 A)	Lamar
Rhame, J. B. (1 T)†	Sumter
Rhodes, A. P. (4 EE)	Walhalla
Rhodes, L. T. (4 EE)†	Darlington
Rhodes, T. L. (1 A)†	Walterboro
Rhodes, T. M. (4 V Ag Ed)	Estill
Rhodes, W. T. (4 TC)	Mayesville
Rhyne, A. R. (2 T)	Gastonia, N. C.
Richards, J. F. (3 ME)†	Highland, N. Y.
Richards, J. G. (3 Ar)	Camden
Richards, L. (2 CE)	Georgetown
Richardson, C. G. (1 E)†	Orangeburg
Richardson, D. M. (1 Pre-Med)	Greenville
Richardson, H. D. (2 ME)	Orangeburg
Richardson, J. H. (3 CE)	Georgetown
Richardson, J. L. (3 T)	Due West
Richardson, T. R. (2 Ag Ec)	Barnwell
Richardson, W. H. (1 V Ag Ed)†	Marion
Richbourg, J. M. (2 ME)	Liberty
Richbourg, W. L. (4 ME)	Liberty
Rickenbaker, D. M. (1 A)†	Summerton
Rickenbaker, M. W. (4 ME)	Summerton
Rickenbaker, T. B. (2 A)	Summerton
Riddick, A. T. (3 ME)	Florence
Riddick, W. R. (3 ME)	Greenwood
Rigby, R. R. (1 V Ag Ed)†	St. George
Riley, H. Y. (1 A)†	Columbia
Riley, Richard A. (2 ME)	Greenville
Riley, Robert A. (1 E)†	Trenton
Rion, A. H. (4 GS)	Columbia
Rivers, E. L. (1 A)†	Greenwich, Conn.
Robbins, J. D. (3 T)	Chester
Roberts, E. D. (2 EE)	Athens, Ga.
Robins, J. E. (3 CE)	Greenville
Robinson, Cecil (4 I Ed)	Wrightsville Beach, N. C.
Robinson, C. C. (1 E)†	Asheville, N. C.
Robinson, D. H. (4 CE)	Chester
Robinson, G. P. (1 T)†	Lancaster
Robinson, H. E. (1 E)†	Chester
Robinson, H. H. (4 T)	Union
Robinson, P. B. (3 Agr)	St. Matthews
Robinson, W. A. (3 EE)	Greer
Robinson, W. F. (1 E)†	Kershaw
Rochester, Steve (3 V Ag Ed)	Salem
Roddey, Dunlap (1 A)†	Rock Hill
Rodman, E. J. (4 Ag Engr)	Rodman
Roesel, J. M. (4 EE)	Augusta, Ga.
Rogers, C. H. (1 E)†	Hartsville
Rogers, D. C. (3 GS)	Pelzer
Rogers, F. C. (1 T)†	Spartanburg
Rogers, F. E. (4 Ag Engr)	Darlington
Rogers. G. L. (1 GS)†	Dillon
Rogers, G. M. (3 GS)	Seneca
Rogers, J. B. (1 E)†	Anderson
Rogers, J. S. (2 GS)	Conway
Rogers, Lynn (1 Pre-Med)†	Clio
Rogers, L. D. (2 I Ed)	Spartanburg
Rogers, S. S. (3 Agr)	Blenheim
Rollins, A. W. (1 E)†	Charleston
Rollinson, J. A. (1 E)†	Waycross, Ga.
Roof, R. C. (2 CE)	Columbia
Roper, F. F. (4 V Ag Ed)	Pickens
Rosenberg, I. M. (1 Ch-Engr)†	Swainsboro, Ga.
Rosenberg, P. H. (1 E)†	Abbeville
Rosenzweig, J. H. (2 A)	Brooklyn, N. Y.
Ross, D. J. (4 T)	West Columbia
Ross, E. A. (4 T)	Savannah, Ga.
Ross, George (4 Ar)	Greenville
Ross, J. T. (1 V Ag Ed)†	Society Hill
Ross, L. G. (1 A)†	Augusta, Ga.
Ross. R. D. (1 GS)†	Gaffney
Ross, T. F. (1 E)†	Greer
Rothell, Claude (2 A)	Saluda
Rowe, E. W. (1 E)†	Bennettsville
Rozier, W. R. (3 V Ag Ed)	Cassatt
Ruddock, W. O. (1 T)†	Kings Mountain, N. C.
Ruff, J. D. (2 Pre-Med)	Ridgeway
Rumsey, A. H. (2 Ch-Engr)	Greenville
Rumph, W. P. (2 I Ed)	Charleston
Rush, C. W. (1 V Ag Ed)†	Greenwood
Rush, W. I. (1 A)†	Holly Hill
Russell, J. S. (1 T)†	Macon, Ga.
Rutledge, F. A. (3 CE)	Charleston
Rutledge, T. B. (4 CE)	Charleston
Ryan, T. H. (1 A)†	Trenton
Saborio, J. R. (1 E)†	Alajuela, Costa Rica
Salley, A. B. (1 GS)†	Orangeburg
Salter, J. A. (3 CE)	Atlanta, Ga.
Salters, L. W. (1 GS)†	Johnston
Sammons, J. E. (1 T)†	Greenville
Sams, B. B. (3 ME)	Mt. Pleasant
Sanders, E. B. (1 A)†	Ritter
Sanders, E. P. (1 E)†	Columbia
Sanders, J. L. (2 ME)	Rock Hill
Sanders, J. W. (1 Pre-Med)†	Henderson, N. C.
Sanders, W. F. (4 WD)	Camden
Sandifer, L. M. (3 GS)	Denmark
Sarratt, F. H. (2 C)	Gaffney
Saunders, F. B. (2 EE)†	Aulander, N. C.
Savedge, O. E. (1 A)†	Wadmalaw Island
Sawyer, H. W. (1 E)†	Monetta
Scarborough, R. C. (1 A)†	Bishopville
Scarborough, R. L. (4 Ag Engr)	Sumter
Schaffer, J. L. (2 A)	Brooklyn, N. Y.
Schneider, A. A. (1 T)†	Paterson, N. J.
Schreiber, W. E. (1 Ch-Engr)†	Rockland, Mass.
Schroder, F. E. (3 CE)	Cranford, N. J.
Scott, R. A. (3 ME)	Biddleford, Maine
Scott, T. A. (3 V Ag Ed)	Honea Path
Seabrook, P. D. (4 Hort)	Johns Island
Sears, J. A. (1 E)†	Asheville, N. C.
Sears, W. J. (2 ME)	Lynn, Mass.
Segars, A. L. (4 Hort)	Hartsville
Segars, R. B. (2 Ag Ec)	Oswego
Seigler, C. W. (2 T)	Anderson
Seigler, J. P. (3 ME)	Starr
Sellers, A. R. (4 I Ed)	Florence
Sellers, C. H. (1 A)	Columbia
Senn, J. D. (2 Ag Engr)	Newberry
Senn, T. A. (2 EE)	Laurens
Settle, H. H. (4 Hort)	Inman
Seyle, F. W. (3 GS)	Savannah, Ga.
Shapiro, R. N. (2 EE)	Union
Sharp, J. D. (4 Agr)	Anderson
Sharpe, R. G. (S)	Abbeville
Sharpe, W. F. (2 CE)	Gaston

Name and Course	Address
Shealy, J. M. (1 V Ag Ed)†	Pomaria
Shealy, R. H. (3 EE)	Carlisle
Shelor, T. B. (3 EE)	Walhalla
Sherman, J. T. (3 V Ag Ed)	Easley
Sherard, W. H. (1 V Ag Ed)†	Ninety Six
Sherer, L. D. (1 E)†	Greenville
Sheriff, C. L. (1 Ed)†	Seneca
Sherrill, H. L. (1 E)†	Cheraw
Shipman, O. H. (4 AH)	Greenville
Shirley, E. H. (1 Ar)†	Greenville
Shirley, G. E. (4 CE)	Anderson
Shirley, J. A. (4 I Ed)	Seneca
Shirley, J. W. (1 C)†	Belton
Shirley, LeRoy (4 Ag Engr)	Anderson
Shirley, W. K. (3 T)	Belton
Shuler, H. L. (1 T)†	Orangeburg
Shuler, J. M. (1 A)†	Aiken
Shuman, Cyril (1 A)	Furman
Shurtleff, S. J. (3 TIE)	Fairhaven, Mass.
Sibley, W. C. (1 E)†	Chesnee
Sills, K. G. (2 ME)	Maplewood, N. J.
Simmons, C. L. (3 Ch-Engr)	Spartanburg
Simmons, J. C. (1 T)†	Greenville
Simmons, M. F. (4 TC)	Greer
Simon, H. M. (2 EE)	Williston
Simonds, J. D. (2 EE)	Orlando
Simons, B. H. (1 E)†	Charleston
Simons, H. M. (1 A)†	Summerville
Simpson, D. N. (4 V Ag Ed)	Iva
Simpson, H. V. (4 TC)	Anderson
Simpson, J. I. (1 Pre-Med)†	Piedmont
Simpson, J. L. (4 Agr)	Iva
Simpson, J. W. (3 ME)	Anderson
Simpson, W. S. (1 E)†	Anderson
Sims, J. J. (4 Ch-Engr)	Easley
Sims, R. Y. (3 EE)	Memphis, Tenn.
Singletary, C. F. (1 I Ed)†	Scranton
Singletary, J. B. (4 Agr)	Coward
Sistare, F. W. (2 CE)	Lancaster
Sizemore, J. A. (1 E)†	Dillon
Skardon, J. W. (3 GS)	Walterboro
Slotchiver, I. J. (1 E)†	Walterboro
Small, C. P. (1 T)†	Lancaster
Small, M. P. (2 ME)	Lancaster
Smart, W. W. G. (3 C)	Shelby, N. C.
Smith, B. J. (2 T)	Lexington, N. C.
Smith, C. E. (2 Pre-Med)	Ridgeland
Smith, C. N. (2 T)	Savannah, Ga.
Smith, D. W. (4 EE)	Williston
Smith, E. H. (4 EE)	Johnston
Smith, E. N. (2 C)	Greenville
Smith, G. L. (4 T)	Springfield
Smith, H. D. (4 T)	Greenville
Smith, H. L. (2 V Ag Ed)	Trenton
Smith, H. W. (2 Ag Ec)	Pageland
Smith, J. F. (2 GS)	Laurens
Smith, L. B. (4 GS)	Rainelle, W. Va.
Smith, L. G. (1 ME)	Easley
Smith, M. H. (1 T)†	Great Falls
Smith, M. T. (4 ME)	Walhalla
Smith, P. F. (4 GS)	Summerville
Smith, Randolph (1 E)†	Greenville
Smith, R. A. (4 V Ag Ed)	Fair Play
Smith, R. D. (3 V Ag Ed)	Bowman
Smith, R. B. (2 CE)	Charleston
Smith, S. C. (1 V Ag Ed)†	Madison
Smith, W. C. (1 GS)†	Johnston
Smith, W. E. (4 Ed)	Salem
Smith, W. H. (4 Ch-Engr)	New Holland, Ga.
Smith, W. N. (1 TC)†	Greenville
Smith, W. T. (4 V Ag Ed)	Winnsboro
Smithey, W. R. (1 GS)†	Columbia
Smoak, R. A. (4 ME)	Branchville
Snead, A. J. (4 CE)	Greenwood
Snell, F. J. (2 V Ag Ed)	Elloree

Name and Course	Address
Snipes, H. E. (1 V Ag Ed)†	Seneca
Snoddy, J. D. (1 T)	Wellford
Snyderman, F. L. (2 TC)	Philadelphia, Pa.
Somerville, A. W. (3 ME)	McConnellsville
Sosa, Daniel (2 ME)	Santurce, P. R.
Sosa, Rafael (2 Ar)	Santurce, P. R.
Sosnowski, J. R. (3 C)	Johns Island
Sottile, V. N. (3 ME)	Charleston
Southerlin, J. R. (3 CE)	Greenville
Sparks, L. M. (4 Ent)	Gaffney
Sparrow, H. R. (1 E)†	East Falls Church, Va.
Spencer, C. A. (2 ME)	Greenville
Sprouse, C. A. (2 T)	Abbeville
Sprouse, J. L. (1 I Ed)†	Abbeville
Sprouse, M. N. (3 EE)	Anderson
Stafford, G. H. (3 GS)	Latta
Stanford, M. C. (4 GS)	Atlanta, Ga.
Stanley, S. G. (1 E)†	Mullins
Stanley, T. E. (2 T)	Marion
Stanton, G. L. (2 EE)	Florence
Starnes, J. O. (3 Ent)	Lancaster
Steadman, W. W. (1 Pre-Med)†	Ridge Spring
Steele, R. N. (3 T)	Fairhaven, Mass.
Stenstrom, E. F. (3 Ag Engr)	Wauchula, Fla.
Stephens, J. R. (2 EE)	Canton, N. C.
Stephens, W. A. (2 EE)	Anderson
Sterghos, J. D. (4 I Ed)	Greenwood
Sternenberg, M. H. (1 GS)†	Parr
Stevenson, J. H. (3 Ag Ec)	Marion
Stevenson, W. T. (1 Ag Engr)†	Seneca
Stewart, A. R. N. (1 E)†	Woodward
Stewart, C. B. (1 Ch-Engr)†	Woodruff
Stewart, E. D. (2 GS)	Greenville
Stewart, H. T. (1 E)†	Marion
Stewart, T. D. (1 E)†	Greenville
Stewart, T. H. (4 V Ag Ed)	Six Mile
Stewart, W. K. (1 E)†	Travelers Rest
Stewart, W. M. (2 EE)	Woodruff
Stickel, H. R. (1 E)†	Delanco, N. J.
Still, A. A. (2 V Ag Ed)	Blackville
Stoddard, R. L. (4 Agr)	Owings
Stokes, C. A. (3 EE)	Greer
Stokes, F. H. (4 V Ag Ed)	Darlington
Stone, A. M. (2 ME)	Clearwater, Fla.
Stone, H. G. (2 GS)	Florence
Stone, J. C. (2 T)	Cedar Mountain, N. C.
Stoudenmire, D. E. (2 V Ag Ed)	Lone Star
Stoudenmire, W. J. (1 E)†	Orangeburg
Stowe, W. E. (1 E)†	Rock Hill
Strange, R. H. (1 E)†	Sumter
Strauss, E. M. (3 ME)	Newberry
Strawhorn, Harold (3 EE)	Bradley
Stribling, S. C. (2 EE)	Gaffney
Stribling, T. E. (3 T)	Habersham, Ga.
Strickland, Harry (1 I Ed)†	Westminster
Strickland, O. K. (4 V Ag Ed)	Nichols
Strom, L. S. (2 T)	McCormick
Stroud, M. C. (2 Ar)	Heath Springs
Stroud, W. C. (4 V Ag Ed)	Richburg
Strunk, L. M. (2 V Ag Ed)	Philadelphia, Pa.
Stuart, C. K. (2 A)	Coranaca
Stuck, K. E. (1 V Ag Ed)†	Pomaria
Stuckey, W. H. (4 Agr)	Bishopville
Sturgis, H. L. (3 T)	Rock Hill
Sturkey, H. A. (2 GS)	McCormick
Styles, J. T. (1 A)†	Travelers Rest
Suddeth, B. N. (1 E)†	Clinton
Sullivan, J. W. (4 T)	Lodge
Sullivan, R. P. (3 T)	Lumberton
Summer, O. R. (2 EE)	Newberry
Sumner, C. D. (2 A)	Bat Cave, N. C.
Suthern, C. A. (2 C)	Taunton, Mass.
Sutker, Abraham (1 V Ag Ed)	McColl
Swails, J. P. (2 Pre-Med)	Andrews
Swearingen, J. C. (4 V Ag Ed)	Trenton

Name and Course	Address
Sweatte, J. E. (2 EE)	Sumter
Swink, R. B. (1 E)†	Clinton
Tallevast, C. J. (2 CE)	Atlanta, Ga.
Tallevast, J. N. (2 Pre-Med)	Florence
Tarleton, H. J. (3 T)	South Orange, N. J.
Tarrant, W. E. (S)	Clemson
Tate, D. H. (3 ME)	Rock Hill
Tate, J. H. (2 CE)	Spartanburg
Taylor, C. J. (1 T)†	Laurens
Taylor, Griffith (2 ME)	Brunswick, Ga.
Taylor, J. O. (4 V Ag Ed)	Mt. Croghan
Teale, W. H. (2 EE)	Hartsville
Templeton, W. D. (2 T)	Lancaster
Terry, A. S. (1 Ag Engr)†	Fountain Inn
Terry, J. R. (3 CE)	Fountain Inn
Thackston, J. E. (4 ME)	Greenville
Thames, F. H. (3 Ch-Engr)	Charleston
Thames, P. B. (2 EE)	Florence
Thomas, A. E. (3 T)	Georgetown
Thomas, D. G. (1 E)†	Greenville
Thomas, G. G. (3 ME)	Rock Hill
Thomas, H. T. (1 V Ag Ed)†	Lamar
Thomas, J. M. (4 Agr)	Jefferson
Thomas, J. R. (2 Ar)	Rock Hill
Thomas, N. J. (2 V Ag Ed)†	Laurenceburg, Tenn.
Thomas, R. E. (2 A)	Fairfax
Thomason, J. E. (4 V Ag Ed)	Simpsonville
Thompson, B. G. (3 ME)	Lodge
Thompson, C. C. (1 E)†	Columbia
Thompson, G. C. (2 EE)	East Falls Church, Va.
Thompson, G. E. (3 Ag Engr)	Chesnee
Thompson, H. M. (2 ME)	Williston
Thompson, J. L. (3 T)	North Augusta
Thompson, J. S. (2 V Ag Ed)	Bucksville
Thompson, J. W. (3 V Ag Ed)	Bowman
Thompson, W. F. (1 Ch-Engr)†	Marion
Thomson, J. W. (2 Ag Ec)	Seneca
Thornburg, R. W. (4 ME)	Bessemer City, N. C.
Thornton, H. A. (1 GS)†	Elberton, Ga.
Thrailkill, B. E. (1 Pre-Med)†	Laurens
Tigler, Leon (1 TC)†	Charleston
Tiller, M. B. (2 ME)	Mayesville
Tillman, D. L. (1 E)†	Cheraw
Tilton, S. R. (1 Ag Engr)†	Leo
Timmerman, R. P. (4 TC)	Graniteville
Timmerman, T. L. (2 T)	Laurens
Timmons, C. T. (3 T)	Hartwell, Ga.
Tindal, W. M. (1 Ch-Engr)†	Greenville
Tindall, F. L. (2 EE)	Inman
Tingle, A. M. (3 EE)	Asheville, N. C.
Tingle, W. B. (2 Agr)	Ora
Tinsley, E. D. (1 T)†	Florence
Tinsley, S. W. (2 A)	Spartanburg
Tisdale, C. F. (3 Ag Ec)	Bryson City, N. C.
Todd, A. L. (3 WD)	Anderson
Todd, B. J. (1 Ag Engr)†	Loris
Todd, C. E. (3 GS)	Fairfax
Todd, L. O. (1 E)†	Fairfax
Tokunaga, R. W. (1 GS)†	Columbia
Tomkinson, R. L. (3 TC)†	Clinton
Toms, R. B. (2 ME)	Iva
Toole, G. M. (2 A)	Williston
Touchberry, R. W. (1 A)†	Pinewood
Townsend, R. E. (1 E)†	Florence
Trammell, W. V. (4 Ch-Engr)	Anderson
Traylor, M. H. (2 A)	Ridgeway
Tribble, W. P. (1 E)†	Donalds
Triplett, W. P. (1 E)†	Chesterfield
Trotti, G. J. (1 Pre-Med)†	Williston
Trowbridge, F. R. (2 Ch-Engr)	Aiken
Truett, E. C. (4 V Ag Ed)	Timmonsville
Tsiropoulos, T. A. (2 EE)	Charleston

Name and Course	Address
Tulla, Valentin (2 CE)†	Santurce, P. R.
Tumblin, G. A. (1 E)†	Clinton
Tupper, James (2 Ar)	Summerville
Turnage, R. E. (2 EE)	Hartsville
Turner, C. A. (4 T)	Fort Mill
Turner, J. W. (1 CE)	Minturn
Turner, S. T. (2 EE)	Taylors
Turner, T. A. (1 T)†	Jackson, Miss.
Turner, W. C. (3 ME)	Piedmont
Turner, W. W. (2 V Ag Ed)	Landrum
Turpin, J. E. (2 V Ag Ed)†	Inman
Tyler, J. C. (1 E)†	Orangeburg
Ulmer, E. Y. (1 E)†	Elloree
Umphlett, C. W. (2 CE)	Witherbee
Uprichard, J. H. (1 E)†	Ware Shoals
Utsey, J. R. (1 C)†	Wando
Valldejuli, J. J. P. (1 Ag Engr)†	San Juan, P. R.
VanderVoort, D. G. (1 E)†	Graniteville
VanDuyne, E. N. (1 Ch-Engr)†	Pine Brook, N. J.
Van Hook, M. L. (1 Ch-Engr)†	Sea Isle, N. J.
Van Valkenburgh, J. F. (3 Ch-Engr)†	Asheville, N. C.
Varn, A. H. (3 EE)	Charleston
Varn, W. H. (1 V Ag Ed)†	Smoaks
Vassey, W. E. (2 V Ag Ed)	Chesnee
Vereen, L. C. (4 Pre-Min)	Latta
Vicaria, Jorge (4 T)	Bogota, Colombia, S. A.
Vicars, J. H. (2 ME)	Waynesboro, Va.
Vickery, H. M. (2 Ch-Engr)	Hartwell, Ga.
Vickery, J. B. (4 V Ag Ed)	Central
Vickery, L. C. (2 T)	Greenville
VonHollen, C. H. (3 T)	Greenville
VonWeller, G. S. (4 GS)	Greenville
Vought, H. C. (1 E)†	Greenville
Vuksta, Thomas (1 E)†	Bethlehem, Pa.
Waddell, R. G. (1 C)†	Aiken
Waddey, C. M. (2 GS)	Augusta, Ga.
Waits, J. K. (2 TC)	Goldville
Walden, A. R. (3 Pre-Med)	Landrum
Waldmann, B. W. (2 CE)	Charleston
Waldron, A. S. (1 T)†	Columbia
Walker, D. C. (1 E)†	Charlotte, N. C.
Walker, D. E. (1 A)†	Norway
Walker, G. H. (1 E)†	Calhoun
Walker, L. A. (1 E)†	Atlanta, Ga.
Walker, M. E. (4 Agr)	Rock Hill
Walker, R. H. (4 EE)	Appleton
Wall, H. A. (1 V Ag Ed)†	Moncks Corner
Wallace, F. X. (2 Ch-Engr)	Schenectady, N. Y.
Wallace, J. R. (3 CE)	Central
Wallace, J. W. (4 V Ag Ed)	Hamer
Wallace, W. P. (1 A)†	Bennettsville
Walsh, B. L. (1 E)†	Johnston
Walters, W. L. (2 EE)	McBee
Wannamaker, H. L. (2 EE)	Charleston
Wannamaker, J. L. (1 V Ag Ed)†	Lexington
Waring, Hampton (3 EE)	Summerville
Warner, J. H. (1 A)†	Greenwood
Warner, V. L. (2 A)	Greenwood
Waters, R. M. (2 A)	Inman
Watkins, B. F. (1 E)†	Greenville
Watkins, D. P. (1 Ar)†	Anderson
Watkins, M. D. (3 Agr)	Westminster
Watkins, M. H. (3 ME)	Pendleton
Watson, D. A. (1 TC)†	Greenville
Watson, J. B. (3 Agr)	Anderson
Watson, J. C. (1 Ag Engr)†	Ridge Spring
Watson, J. E. (2 CE)	Gaffney
Watson, J. F. (4 Ch-Engr)	Greenwood
Watson, M. B. (3 GS)	Greenville
Watson, M. P. (2 Ed)	Toddville

Name and Course	Address
Watson, R. G. (2 CE)	Spartanburg
Way, H. G. (3 D)	Hemingway
Wearn, W. C. (4 EE)	Newberry
Weaver, A. E. (3 ME)	Jacksonville, Fla.
Weaver, T. H. (2 ME)	Florence
Webb, G. R. (4 CE	Saluda
Webb, Henry W. (2 A)	Williston
Webb, Hugh W. (4 CE)	Saluda
Webb, J. E. (1 E)†	Bishopville
Webb, J. W. (1 GS)†	Brunson
Webb, S. C. (2 CE)	Anderson
Webster, F. S. (3 Ch-Engr)	Greenville
Webster, J. O. (1 E)†	Loris
Webster, M. B. (1 E)†	Gaffney
Webster, S. R. (4 ME)	Mullins
Weimortz, E. D. (1 A)†	Williston
Weingartner, R. W. (2 ME)	Philadelphia, Pa.
Weinheimer, R. J. (3 EE)	Erie, Pa.
Weintraub, H. R. (1 Ch-Engr)†	Asheville, N. C.
Weir, W. S. (1 I Ed)†	Clinton
Welborn, J. W. (1 C)†	Union
Welch, F. R. (2 EE)	Charleston
Wells, H. B. (1 E)†	Newberry
Welsh, S. J. (1 E)†	Abbeville
Wenige, A. E. (2 CE)	Asheville, N. C.
Wentzel, D. B. (4 GS)	Clemson
Wescoat, R. Y. (1 Pre-Med)†	Sumter
West, E. M. (1 GS)†	Marion
West, F. T. (3 V Ag Ed)	Marion
West, H. D. (3 Agr)	Bowman
West, I. W. (3 GS)	Richmond, Va.
West, O. S. (2 A)	Holly Hill
West, T. W. (1 V Ag Ed)†	Weaverville, N. C.
Westervelt, J. I. (2 ME)	Greenville
Whall, R. F. (3 Ch-Engr)	San Juan, P. R.
Wham, G. S. (4 TC)	Mountville
Whatley, J. E. (1 E)†	Greenville
Wheeler, G. A. (4 AH)	Spartanburg
Wheeler, G. C. (4 D)	Saluda
Wheeler, R. F. (4 V Ag Ed)	Batesburg
Whisenant, J. E. (3 ME)	Spartanburg
Whisnant, W. L. (1 E)†	Charlotte, N. C.
Whisonant, A. R. (1 E)†	Rock Hill
Whitaker, H. H. (1 A)†	Camden
White, A. L. (1 Ar)†	Rock Hill
White, E. T. (3 GS)	Belton
White, J. R. (3 Agr)	Sumter
White, L. A. (1 V Ag Ed)†	Charleston
White, M. E. (1 A)†	Timmonsville
White, T. P. (3 Ch-Engr)	Cordesville
White, William C. (3 CE)	Rock Hill
White, Wilson C. (1 A)†	Chester
Whitesides, W. L. (1 E)†	Smyrna
Wickham, R. E. (1 Ch-Engr)†	Charleston
Wiggins, R. C. (2 AH)	Hopkins
Wiggins, R. H. (1 E)†	Little Rock
Wigington, L. M. (2 EE)	Anderson
Wigington, W. H. (4 EE)	Anderson
Wikle, A. P. (1 E)†	Clarkesville, Ga.
Wilds, M. C. (1 E)†	Hendersonville, N. C.
Wilkerson, C. F. (2 V Ag Ed)	Hickory Grove
Williams, A. G. (2 A)	Winnsboro
Williams, B. B. (1 TC)†	Bath
Williams, George E. (1 E)†	Orangeburg
Williams, Gordon E. (3 T)	Greenville
Williams, G. H. (2 Pre-Med)	Charleston
Williams, G. L. (3 V Ag Ed)	Neeses
Williams, G. P. (3 EE)	Kingstree
Williams, H. C. (1 Ag Engr)†	Cordele, Ga.
Williams, H. F. (1 Pre-Med)†	Florence
Williams, J. D. (1 A)†	Dacusville
Williams, J. E. (S)†	Bath
Williams, J. P. (2 Ar)	Callison
Williams, L. A. (3 Agr)	Olar
Williams, R. G. (1 Ch-Engr)†	Andrews
Williams, W. B. (2 ME)	Gaffney
Williams, W. C. (3 GS)	Swansea
Williamson, J. F. (2 Pre-Med)	Columbia
Williamson, S. A. (3 GS)	Aiken
Willimon, E. L. (3 Ar)	Florence
Willis, J. W. (4 ME)	Lynchburg
Wilson, B. R. (2 Ent)	Darlington
Wilson, C. L. (4 V Ag Ed)	Fort Mill
Wilson, C. P. (2 Ed)	Ridgeland
Wilson, E. F. (3 I Ed)	Abbeville
Wilson, F. D. (1 A)†	Burton
Wilson, H. B. (3 T)	Abbeville
Wilson, H. S. (4 EE)	Calhoun Falls
Wilson, J. G. (1 E)†	Cheraw
Wilson, J. M. (2 Ar)	Charleston
Wilson, R. B. (3 EE)	Piedmont
Wilson, S. J. (2 EE)	Allendale
Wilson, T. H. (2 Ch-Engr)	Columbia
Wilson, T. V. (3 Ag Engr)	Piedmont
Wilson, W. C. (3 AH)	Atlanta, Ga.
Wilson, W. R. (2 EE)	Camden
Wily, R. R. (4 ME)	Bethlehem, Pa.
Windell, A. M. (1 V Ag Ed)†	Rock Hill
Windell, J. K. (2 Ag Engr)	Rock Hill
Winebrenner, J. S. (1 Ag Engr)†	Mountville
Winstead, F. S. (1 GS)	Mullins
Winstead, Richard (1 E)†	Mullins
Wise, G. L. (1 V Ag Ed)	Newberry
Withers, J. S. (2 CE)†	Asheville, N. C.
Witherspoon, H. L. (2 ME)	Sumter
Wolfe, E. C. (1 GS)†	Inman
Wolfe, J. E. (1 E)†	Laurens
Wood, C. R. (2 T)	Greenville
Wood, M. R. (2 Ed)	Greenville
Wood, W. D. (4 Ag Ec)	Bennettsville
Woodham, J. R. (1 Ag Engr)†	Bishopville
Woodhurst, R. S. (3 Ar)	Abbeville
Woodruff, B. E. (3 Ch-Engr)	Cedartown, Ga.
Woods, T. D. (4 T)	Fort Mill
Woodson, W. W. (1 E)†	Central
Woodward, J. E. (4 EE)	Greenville
Workman, A. C. (1 E)†	Clinton
Workman, J. N. (2 Pre-Med)	McCormick
Workman, W. D. (4 GS)	Clinton
Wrenn, G. L. (2 EE)	Charlotte, N. C.
Wright, C. E. (2 A)	Decatur, Ga.
Wright, C. K. (3 GS)	Columbia
Wright, C. R. (4 Pre-Med)	Gastonia, N. C.
Wright, E. E. (3 EE)	Sumter
Wright, E. P. (1 A)†	Seneca
Wright, G. C. (1 Ag Engr)†	Seneca
Wright, H. G. (1 E)†	Shelton
Wright, T. C. (3 V Ag Ed & Agr)	Ward
Wright, W. D. (1 E)†	Georgetown
Wylie, O. W. (2 Ag Engr)	Columbia
Wyndham, F. E. (4 AH)	Moncks Corner
Yarboro, T. W. (1 E)†	Mullins
Yarborough, F. A. (1 A)†	Lamar
Yarbrough, B. F. (1 E)†	Atlanta, Ga.
Yarid, S. K. (3 C)	Seneca
Yates, W. J. (1 Ar)	Sumter
Yeargin, B. F. (3 T)	Ware Shoals
Yecko, A. H. (2 Ar)	McDonald, Pa.
Yoder, C. E. (2 CE)	Abbeville
Yonce, C. Z. (3 I Ed)	Edgefield
Young, E. L. (4 D)	Timmonsville
Young, F. G. (4 V Ag Ed)	Hamilton, Ala.
Young, F. M. (1 E)†	Fairfax
Young, J. G. (3 Pre-Med)	Florence
Young, J. W. (2 ME)	Bethlehem, Pa.
Young, R. H. (1 A)†	Clinton
Zakheim, Ralph, (1 A)†	Brooklyn, N. Y.
Zeigler, A. E. (3 T)	Columbia
Zeigler, J. S. (4 ME)	Florence
Zerbst, H. C. (4 Hort)	Charleston

*SUPPLEMENTARY LIST OF STUDENTS, SECOND SEMESTER, 1940-1941

Name and Course	Address
Ambrose, L. R. (S)	Clemson
Arnaud, J. R. (1 A)†	Arlington, Va.
Baggott, B. H. (1 E)	Columbia
Beaty, A. R. (2 TC)	Seneca
Berry, V. (1 V Ag Ed)	Minturn
Black, Donal (1 E)	Columbia
Chastain, R. C. (2 V Ag Ed)	Pickens
Cline, M. I. (S)†	Clemson
Coggins, D. R. (1 Ed)†	Inman
Culler, C. G. (1 GS)	Orangeburg
Culler, C. H. (1 GS)	Orangeburg
Dobbins, W. L. (S)	Townville
Duke, C. H. (1 GS)†	Columbia
Edens, M. B. 2 Pre-Med)	Pickens
Farmer, R. S. (4 ME)	Charleston
Freeman, E. J. (S)	Clemson
Goethe, R. N. (1 E)†	Charleston
Green, E. F. (1 E)†	Spartanburg
Grimes, H. E. (1 E)†	Gainesville, Ga.
Hawkins, G. F. (S)	Clemson
Hoover, M. W. (1 A)†	Arlington, Va.
Huggins, R. B. (3 Agr)	Johnsonville
Kearns, G. P. (1 E)†	Mount Pleasant
Lambrakos, P. C. (2 GS)	Charleston
Lawson, C. S. (1 E)†	Birmingham, Ala.
Leaphart, W. P. (1 V Ag Ed)†	Gilbert
Lee, W. F. (2 CE)†	Charlotte, N. C.
Leonard, M. M. (1 Pre-Med)†	Asheville, N. C.
Lindsay, H. N. (2 T)	Clemson
Livingston, C. M. (2 V Ag Ed)	Lexington
McKay, W. W. (1 T)†	Tallassee, Ala.
Manning, W. M. (1 E)†	Sumter
Massey, L. M. (4 EE)	Fort Mill
Miller, H. F. (4 V Ag Ed)	Jefferson
Molina, F. A. (4 Pre-Med)	San Juan, Puerto Rico
Olshan, C. (2 A)†	Albany, N. Y.
O'Neal, J. B. (4 GS)	Clemson
Philpot, C. P. (S)	Clemson
Pusser, R. G. (1 V Ag Ed)†	Chesterfield
Riba, G. A. (1 A)†	San Jose, Costa Rica
Scarboro, M. D. (1 GS)	Buffalo
Sharp, F. A. (1 Ag Engr)	Clemson
Sharp, W. B. (1 GS)†	Fort Snelling, Minn.
Shrader, N. L. (1 Ar)†	Louisville, Ky.
Smoyner, E. (2 CE)†	Brooklyn, N. Y.
Sottile, S. V. (4 CE)	Charleston
Taylor, S. V. (2 A)	Greelyville

*Students enrolled for the second semester who were not enrolled for the first semester. In this list, students are classified according to their credits at the beginning of the second semester; new students admitted at the beginning of the second semester are indicated by a dagger (†).

NUMBER OF STUDENTS MAJORING IN EACH CURRICULUM 1940-1941

Classification	Agriculture	Agricultural Engineering	Chemistry	Architecture	Engineering (Unclassified)	Chemistry-Engineering	Civil Engineering	Electrical Engineering	Mechanical Engineering	General Science	Pre-Medical	Textile Engineering	Textile Chemistry and Dyeing	Weaving and Designing	Vocational Agricultural Education	Education	Industrial Education	Textile Industrial Education	Special	Enrollment by Classes
Senior	70	20	14	13		12	23	29	32	35	3	62	15	4	55	3	12		1	403
Junior	79	10	12	21	2	17	25	38	61	39	24	59	13	5	56		12	2	1	476
Sophomore	114	16	12	20	1	18	41	66	86	42	38	67	17	2	67	13	10	2		632
Freshman	138	25	23	17	310	37	2	3	3	47	43	77	15		75	17	15	1		848
Special																			22	22
Totals	401	71	61	71	313	84	91	136	182	163	108	265	60	11	253	33	49	5	24	2381

ENROLLMENT BY COUNTIES AND STATES

1940-1941

County	*Total*
Abbeville	43
Aiken	45
Allendale	15
Anderson	139
Bamberg	13
Barnwell	20
Beaufort	13
Berkeley	12
Calhoun	16
Charleston	99
Cherokee	26
Chester	27
Chesterfield	35
Clarendon	27
Colleton	25
Darlington	43
Dillon	22
Dorchester	21
Edgefield	23
Fairfield	20
Florence	77
Georgetown	19
Greenville	186
Greenwood	69
Hampton	14
Horry	28
Jasper	10
Kershaw	30
Lancaster	31
Laurens	56
Lee	19
Lexington	33
Marion	28
Marlboro	22
McCormick	15
Newberry	32
Oconee	86
Orangeburg	67
Pickens	79
Richland	97
Saluda	23
Spartanburg	96
Sumter	54
Union	24
Williamsburg	31
York	77
South Carolina Total	1987

State or Country	*Total*
Alabama	6
California	1
Colorado	1
Connecticut	6
Costa Rica	2
Delaware	1
District of Columbia	9
Florida	16
Georgia	98
Hawaii	1
Illinois	1
Kentucky	3
Maine	1
Maryland	4
Massachusetts	12
Michigan	1
Minnesota	2
Mississippi	1
New Jersey	20
New York	28
North Carolina	108
Ohio	2
Pennsylvania	30
Puerto Rico	12
South America	1
South Carolina	1987
Tennessee	9
Virginia	13
Washington	1
West Virginia	3
Wisconsin	1
Grand Total	2381

INDEX